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Inventor(s): Josee Hamel et al.

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JUL 1 2 2006

TGAAATTTA GTAAAAAATA TATAGCAGCT GGATCAGCTG TTATCGTATC CTTGAGTCTA 60 TGTGCCTATG CACTAAACCA GCATCGTTCG CAGGAAAATA AGGACAATAA TCGTGTCTCT TATGTGGATG GCAGCCAGTC AAGTCAGAAA AGTGAAAACT TGACACCAGA CCAGGTTAGC CAGAAAGAAG GAATTCAGGC TGAGCAAATT GTAATCAAAA TTACAGATCA GGGCTATGTA ACGTCACACG GTGACCACTA TCATTACTAT AATGGGAAAG TTCCTTATGA TGCCCTCTTT AGTGAAGAAC TCTTGATGAA GGATCCAAAC TATCAACTTA AAGACGCTGA TATTGTCAAT GAAGTCAAGG GTGGTTATAT CATCAAGGTC GATGGAAAAT ATTATGTCTA CCTGAAAGAT GCAGCTCATG CTGATAATGT TCGAACTAAA GATGAAATCA ATCGTCAAAA ACAAGAACAT GTCAAAGATA ATGAGAAGGT TAACTCTAAT GTTGCTGTAG CAAGGTCTCA GGGACGATAT ACGACAAATG ATGGTTATGT CTTTAATCCA GCTGATATTA TCGAAGATAC GGGTAATGCT TATATCGTTC CTCATGGAGG TCACTATCAC TACATTCCCA AAAGCGATTT ATCTGCTAGT 660 GAATTAGCAG CAGCTAAAGC ACATCTGGCT GGAAAAAATA TGCAACCGAG TCAGTTAAGC 720 TATTCTTCAA CAGCTAGTGA CAATAACACG CAATCTGTAG CAAAAGGATC AACTAGCAAG 780 CCAGCAAATA AATCTGAAAA TCTCCAGAGT CTTTTGAAGG AACTCTATGA TTCACCTAGC 840 GCCCAACGTT ACAGTGAATC AGATGGCCTG GTCTTTGACC CTGCTAAGAT TATCAGTCGT 900 ACACCAAATG GAGTTGCGAT TCCGCATGGC GACCATTACC ACTTTATTCC TTACAGCAAG 960 CTTTCTGCTT TAGAAGAAAA GATTGCCAGA ATGGTGCCTA TCAGTGGAAC TGGTTCTACA 1020 GTTTCTACAA ATGCAAAACC TAATGAAGTA GTGTCTAGTC TAGGCAGTCT TTCAAGCAAT CCTTCTTCTT TAACGACAAG TAAGGAGCTC TCTTCAGCAT CTGATGGTTA TATTTTTAAT CCAAAAGATA TCGTTGAAGA AACGGCTACA GCTTATATTG TAAGACATGG TGATCATTTC 1200 CATTACATTC CAAAATCAAA TCAAATTGGG CAACCGACTC TTCCAAACAA TAGTCTAGCA 1260 ACACCTTCTC CATCTCTCC AATCAATCCA GGAACTTCAC ATGAGAAACA TGAAGAAGAT 1320 GGATACGGAT TTGATGCTAA TCGTATTATC GCTGAAGATG AATCAGGTTT TGTCATGAGT 1380 CACGGAGACC ACAATCATTA TTTCTTCAAG AAGGACTTGA CAGAAGAGCA AATTAAGGCT 1440 GCGCAAAAAC ATTTAGAGGA AGTTAAAACT AGTCATAATG GATTAGATTC TTTGTCATCT 1500 CATGAACAGG ATTATCCAGG TAATGCCAAA GAAATGAAAG ATTTAGATAA AAAAATCGAA GAAAAAATTG CTGGCATTAT GAAACAATAT GGTGTCAAAC GTGAAAGTAT TGTCGTGAAT 1620 AAAGAAAAA ATGCGATTAT TTATCCGCAT GGAGATCACC ATCATGCAGA TCCGATTGAT 1680 GAACATAAAC CGGTTGGAAT TGGTCATTCT CACAGTAACT ATGAACTGTT TAAACCCGAA GAAGGAGTTG CTAAAAAAGA AGGGAATAAA GTTTATACTG GAGAAGAATT AACGAATGTT 1800 GTTAATTTGT TAAAAAATAG TACGTTTAAT AATCAAAACT TTACTCTAGC CAATGGTCAA 1860 AAACGCGTTT CTTTTAGTTT TCCGCCTGAA TTGGAGAAAA AATTAGGTAT CAATATGCTA 1920 GTAAAATTAA TAACACCAGA TGGAAAAGTA TTGGAGAAAG TATCTGGTAA AGTATTTGGA 1980 GAAGGAGTAG GGAATATTGC AAACTTTGAA TTAGATCAAC CTTATTTACC AGGACAAACA 2040 TTTAAGTATA CTATCGCTTC AAAAGATTAT CCAGAAGTAA GTTATGATGG TACATTTACA 2100 GTTCCAACCT CTTTAGCTTA CAAAATGGCC AGTCAAACGA TTTTCTATCC TTTCCATGCA 2160 GGGGATACTT ATTTAAGAGT GAACCCTCAA TTTGCAGTGC CTAAAGGAAC TGATGCTTTA 2220 GTCAGAGTGT TTGATGAATT TCATGGAAAT GCTTATTTAG AAAATAACTA TAAAGTTGGT GAAATCAAAT TACCGATTCC GAAATTAAAC CAAGGAACAA CCAGAACGGC CGGAAATAAA ATTCCTGTAA CCTTCATGGC AAATGCTTAT TTGGACAATC AATCGACTTA TATTGTGGAA GTACCTATCT TGGAAAAAGA AAATCAAACT GATAAACCAA GTATTCTACC ACAATTTAAA AGGAATAAAG CACAAGAAAA CTCAAAACTT GATGAAAAGG TAGAAGAACC AAAGACTAGT 2520 GAGAAGGTAG AAAAAGAAAA ACTTTCTGAA ACTGGGAATA GTACTAGTAA TTCAACGTTA GAAGAAGTTC CTACAGTGGA TCCTGTACAA GAAAAAGTAG CAAAATTTGC TGAAAGTTAT GGGATGAAGC TAGAAAATGT CTTGTTTAAT ATGGACGGAA CAATTGAATT ATATTTACCA 2700 TCAGGAGAAG TCATTAAAAA GAATATGGCA GATTTTACAG GAGAAGCACC TCAAGGAAAT GGTGAAAATA AACCATCTGA AAATGGAAAA GTATCTACTG GAACAGTTGA GAACCAACCA ACAGAAAATA AACCAGCAGA TTCTTTACCA GAGGCACCAA ACGAAAAACC TGTAAAACCA GAAAACTCAA CGGATAATGG AATGTTGAAT CCAGAAGGGA ATGTGGGGGAG TGACCCTATG 2940 TTAGATCCAG CATTAGAGGA AGCTCCAGCA GTAGATCCTG TACAAGAAAA ATTAGAAAAA 3000 TTTACAGCTA GTTACGGATT AGGCTTAGAT AGTGTTATAT TCAATATGGA TGGAACGATT
GAATTAAGAT TGCCAAGTGG AGAAGTGATA AAAAAGAATT TATCTGATTT CATAGCGTAA
3120 (SEQ ID NO: 1)

MKFSKKYIAA	GSAVIVSLSL	CAYALNOHRS	QENKDNNRVS	YVDGSQSSQK		50
SENLTPDQVS			TSHGDHYHYY			100
SEELLMKDPN	YQLKDADIVN	EVKGGYIIKV	DGKYYVYLKD	AAHADNVRTK		150
DEINRQKQEH	VKDNEKVNSN	VAVARSQGRY	TTNDGYVFNP	ADIIEDTGNA		200
YIVPHGGHYH	YIPKSDLSAS	ELAAAKAHLA	GKNMQPSQLS	YSSTASDNNT		250
QSVAKGSTSK	PANKSENLQS	LLKELYDSPS	AQRYSESDGL	VFDPAKIISR		300
TPNGVAIPHG	DHYHFIPYSK	LSALEEKIAR	MVPISGTGST	VSTNAKPNEV		350
VSSLGSLSSN	PSSLTTSKEL	SSASDGYIFN	PKDIVEETAT	AYIVRHGDHF		400
HYIPKSNQIG	QPTLPNNSLA	TPSPSLPINP	GTSHEKHEED	GYGFDANRII		450
AEDESGFVMS	HGDHNHYFFK	KDLTEEQIKA	AQKHLEEVKT	SHNGLDSLSS		500
HEQDYPGNAK	EMKDLDKKIE	EKIAGIMKQY		KEKNATIYPH		550
GDHHHADPID	EHKPVGIGHS	HSNYELFKPE	EGVAKKEGNK	VYTGEELTNV		600
VNLLKNSTFN	NQNFTLANGQ	KRVSFSFPPE	LEKKLGINML	VKLITPDGKV		650
LEKVSGKVFG		LDQPYLPGQT		PEVSYDGTFT		700
VPTSLAYKMA	SQTIFYPFHA	GDTYLRVNPQ		VRVFDEFHGN		750
AYLENNYKVG	EIKLPIPKLN	QGTTRTAGNK		LDNOSTYIVE		800
VPILEKENQT	DKPSILPQFK			EKVEKEKLSE		850
TGNSTSNSTL	EEVPTVDPVQ	EKVAKFAESY		MDGTIELYLP		900
SGEVIKKNMA	DFTGEAPQGN	GENKPSENGK		TENKPADSLP		950
EAPNEKPVKP	ENSTDNGMLN	PEGNVGSDPM	LDPALEEAPA	VDPVQEKLEK		1000
FTASYGLGLD	SVIFNMDGTI	ELRLPSGEVI		SEO ID NO:	2)	1039
			,		/	2000

		•				
	ATAAAAAATA					60
	TAGGTTTGCA					120
	AACAAGCGAC					180
	TCAACGCCGA					240
	ACCATTATCA					300
	TCATGAAAGA					360
	GTTATGTCAT					420
	ATAATGTCCG					480
	AAGGAGGGAC					540
	CCACAGATGA					600
	ATATCGTTCC					660
	AGTTGGCTGC					720
	ATCGCCGACA					780
	CAGGAACTAC					840
	GTAATGACAT					900
	TAGAATCTGA					960
	TAGCTGTCCC					1020
	AAAAACGAAT					1080
GTACCAGATT	CAAGACCAGA	AGAACCAAGT	CCACAACCGA	CTCCAGAACC	TAGTCCAAGT	1140
	CACCAAATCC					1200
AAAGAAGCTG	TTCGAAAAGT	AGGCGATGGT	TATGTCTTTG	AGGAGAATGG	AGTTTCTCGT	1260
TATATCCCAG	CCAAGAATCT	TTCAGCAGAA	ACAGCAGCAG	GCATTGATAG	CAAACTGGCC	1320
	GTTTATCTCA					1380
CGAGAATTTT	ACAATAAGGC	TTATGACTTA	CTAGCAAGAA	TTCACCAAGA	TTTACTTGAT	1440
	GACAAGTTGA					1500
	ATAAAGTCAA					1560
	GTTTAGGAAA					1620
	TGGCAGGCAA					1680
	ATGAGGGGGA					1740
	GTTTGTCTGA					1800
	CTCCTTCGAC					1860
	ACAACCGCGT					1920
	ATACTGTAGA					1980
	TCAAATTTGA					2040
ACTCTTGAGG	ATCTTTTGGC	GACTGTCAAG	TACTATGTCG	AACATCCAAA	CGAACGTCCG	2100
CATTCAGATA	ATGGTTTTGG	TAACGCTAGC	GACCATGTTC	AAAGAAACAA	AAATGGTCAA	2160
GCTGATACCA	ATCAAACGGA	AAAACCAAGC	GAGGAGAAAC	CTCAGACAGA	AAAACCTGAG	2220
GAAGAAACCC	CTCGAGAAGA	GAAACCACAA	AGCGAGAAAC	CAGAGTCTCC	AAAACCAACA	2280
	AAGAAGAATC					2340
	AACTGAGAGA					2400
	CCAAAGAGAC					2460
	CTATTATGGC	AGAAGCTGAA	AAACTATTGG	CTTTATTAAA	GGAGAGTAAG	2520
TAA (SEQ	ID NO: 3)					2523
	*					-

MKINKKYLAG	SVATLVLSVC	AYELGLHQAQ	TVKENNRVSY	IDGKQATQKT		50
ENLTPDEVSK	REGINAEQIV	IKITDQGYVT	SHGDHYHYYN	GKVPYDAIIS		100
EELLMKDPNY	QLKDSDIVNE	IKGGYVIKVN	GKYYVYLKDA	AHADNVRTKE		150
EINRQKQEHS	*			FNASDIIEDT		200
GDAYIVPHGD	HYHYIPKNEL	SASELAAAEA	FLSGRENLSN	LRTYRRQNSD		250
		TSNNSNTNSQ				300
QRHVESDGLI	FDPAQITSRT	ARGVAVPHGN	HYHFIPYEQM	SELEKRIARI		350
IPLRYRSNHW	VPDSRPEEPS	PQPTPEPSPS	PQPAPNPQPA	PSNPIDEKLV		400
KEAVRKVGDG	YVFEENGVSR	YIPAKNLSAE	TAAGIDSKLA	KQESLSHKLG		450
AKKTDLPSSD	REFYNKAYDL	LARIHQDLLD	NKGRQVDFEA	LDNLLERLKD		500
VSSDKVKLVD	DILAFLAPIR	HPERLGKPNA	QITYTDDEIQ	VAKLAGKYTT		550
EDGYIFDPRD	ITSDEGDAYV	TPHMTHSHWI	KKDSLSEAER	AAAQAYAKEK		600
GLTPPSTDHQ	DSGNTEAKGA	EAIYNRVKAA	KKVPLDRMPY	NLQYTVEVKN		650
GSLIIPHYDH	YHNIKFEWFD	EGLYEAPKGY	TLEDLLATVK	YYVEHPNERP		700
HSDNGFGNAS	DHVQRNKNGQ	ADTNQTEKPS	EEKPQTEKPE	EETPREEKPQ		750
SEKPESPKPT	EEPEEESPEE	SEEPQVETEK	VEEKLREAED	LLGKIQDPII		800
KSNAKETLTG	LKNNLLFGTQ	DNNTIMAEAE	KLLALLKESK	(SEQ ID NO:	4)	840

ATGGAGAATA	TAGACATGTT	TAAATCAAAT	CATGAGCGAA	GAATGCGTTA	TTCCATTCGT	60
AAATTTAGTG	TAGGAGTAGC	TAGCGTAGCT	GTTGCCAGTC	TTTTTATGGG	AAGTGTTGTA	120
CATGCGACAG	AGAAAGAGGG	AAGTACCCAA	GCAGCCACTT	CTTTTAATAG	GGGAAATGGA	180
AGTCAGGCAG	AACAACGTGG	AGAACTCGAT	TTAGAACGAG	ATAAGGCAAT	GAAAGCGGTC	240
AGTGAATATG	TAGGAAAAAT	GGTGAGAGAT	GCCTATGTAA	AATCAGATAG	AAAACGACAT	300
AAAAATACTG	TAGCTCTAGT	TAACCAGTTG	GGAAACATTA	AGAACAGGTA	TTTGAATGAA	360
ATAGTTCATT		AAGCCAACTA				420
		ATTTGAAAAG				480
TCCACTAAAC	CAGAAACTCC	GCAGCCGGAA	AATCCAGAGC	ATCAAAAACC	AACAACTCCA	540
TCTCCGGATA	CCAAACCAAG	CCCTCAACCA	GAAGGCAAGA	AACCAAGCGT	ACCAGACATT	600
AATCAGGAAA	AAGAAAAAGC	TAAGCTTGCT	GTAGTAACCT	ACATGAGCAA	GATTTTAGAT	660
GATATACAAA	AACATCATCT	GCAGAAAGAA	AAACATCGTC	AGATTGTTGC	TCTTATTAAG	720
GAGCTTGATG	AGCTTAAAAA	GCAAGCTCTT	TCTGAAATTG	ATAATGTAAA	TACCAAAGTA	780
GAAATTGAAA	ATACAGTCCA	CAAGATATTT	GCAGACATGG	ATGCAGTTGT	GACTAAATTC	840
AAAAAAGGCT	TAACTCAGGA	CACACCAAAA	GAACCAGGTA	ACAAAAAACC	ATCTGCTCCA	900
AAACCAGGTA	TGCAACCAAG	TCCTCAACCA	GAGGTTAAAC	CGCAGCTGGA	AAAACCAAAA	960
CCAGAGGTTA	AACCGCAACC	AGAAAAACCA	AAACCAGAGG	TTAAACCGCA	GCCGGAAAAA	1020
CCAAAACCAG	AGGTTAAACC	GCAGCCGGAA	AAACCAAAAC	CAGAGGTTAA	ACCGCAGCCG	1080
GAAAAACCAA	AACCAGAGGT	TAAACCGCAG	CCGGAAAAAC	CAAAACCAGA	GGTTAAACCG	1140
CAGCCGGAAA	AACCAAAACC	AGAGGTTAAA	CCGCAGCCGG	AAAAACCAAA	ACCAGAGGTT	1200
AAACCGCAGC	CGGAAAAACC	AAAACCAGAG	GTTAAACCGC	AGCCGGAAAA	ACCAAAACCA	1260
GAGGTTAAAC	CGCAGCCGGA	AAAACCAAAA	CCAGAGGTTA	AACCGCAACC	AGAAAAACCA	1320
AAACCAGAGG	TTAAACCGCA	ACCAGAAAAA	CCAAAACCAG	ATAATAGCAA	GCCACAAGCA	1380
GATGATAAGA	AGCCATCAAC	TACAAATAAT	TTAAGCAAGG	ACAAGCAACC	TTCTAACCAA	1440
		AACAAATAAA		CATTGCCATC	AACTGGATCT	1500
ATTTCAAATC	TAGCACTTGA	AATTGCAGGT	CTTCTTACCT	TGGCGGGGGC	AACCATTCTT	1560
GCTAAGAAAA	GAATGAAATA	G (SEQ ID	NO: 5)			1581

MENIDMFKSN	HERRMRYSIR	KFSVGVASVA	VASLFMGSVV	HATEKEGSTQ	50
AATSFNRGNG	SQAEQRGELD	LERDKAMKAV	SEYVGKMVRD	AYVKSDRKRH	100
	GNIKNRYLNE				150
DSFSSSSSSS	STKPETPQPE	NPEHQKPTTP	SPDTKPSPQP	EGKKPSVPDI	200
NQEKEKAKLA	VVTYMSKILD	DIQKHHLQKE	KHRQIVALIK	ELDELKKQAL	250
SEIDNVNTKV	EIENTVHKIF	ADMDAVVTKF	KKGLTQDTPK	EPGNKKPSAP	300
KPGMQPSPQP	EVKPQLEKPK	PEVKPQPEKP	KPEVKPQPEK	PKPEVKPQPE	350
KPKPEVKPQP	EKPKPEVKPQ	PEKPKPEVKP	QPEKPKPEVK	POPEKPKPEV	400
KPQPEKPKPE	VKPQPEKPKP	EVKPQPEKPK	PEVKPQPEKP	KPEVKPOPEK	450
PKPDNSKPQA	DDKKPSTTNN	LSKDKQPSNQ	ASTNEKATNK	PKKSLPSTGS	500
ISNLALEIAG	LLTLAGATIL	AKKRMK	(SEQ ID NO): 6)	526

ATGAAATTTA	GTAAAAAATA	TATAGCAGCT	GGATCAGCTG	TTATCGTATC	CTTGAGTCTA	60
TGTGCCTATG	CACTAAACCA	GCATCGTTCG	CAGGAAAATA	AGGACAATAA	TCGTGTCTCT	120
TATGTGGATG	GCAGCCAGTC	AAGTCAGAAA	AGTGAAAACT	TGACACCAGA	CCAGGTTAGC	180
CAGAAAGAAG	GAATTCAGGC	TGAGCAAATT	GTAATCAAAA	TTACAGATCA	GGGCTATGTA	240
ACGTCACACG	GTGACCACTA	TCATTACTAT	AATGGGAAAG	TTCCTTATGA	TGCCCTCTTT	300
AGTGAAGAAC	TCTTGATGAA	GGATCCAAAC	TATCAACTTA	AAGACGCTGA	TATTGTCAAT	360
GAAGTCAAGG	GTGGTTATAT	CATCAAGGTC	GATGGAAAAT	ATTATGTCTA	CCTGAAAGAT	420
GCAGCTCATG	CTGATAATGT	TCGAACTAAA	GATGAAATCA	ATCGTCAAAA	ACAAGAACAT	480
GTCAAAGATA	ATGAGAAGGT	TAACTCTAAT	GTTGCTGTAG	CAAGGTCTCA	GGGACGATAT	540
ACGACAAATG		CTTTAATCCA	GCTGATATTA	TCGAAGATAC	GGGTAATGCT	600
TATATCGTTC		TCACTATCAC	TACATTCCCA	AAAGCGATTT	ATCTGCTAGT	660
	CAGCTAAAGC			TGCAACCGAG	TCAGTTAAGC	720
	CAGCTAGTGA		CAATCTGTAG	CAAAAGGATC	AACTAGCAAG	780
CCAGCAAATA	AATCTGAAAA		CTTTTGAAGG	AACTCTATGA	TTCACCTAGC	840
GCCCAACGTT	ACAGTGAATC	AGATGGCCTG	GTCTTTGACC	CTGCTAAGAT	TATCAGTCGT	900
ACACCAAATG	GAGTTGCGAT	TCCGCATGGC	GACCATTACC	ACTTTATTCC	TTACAGCAAG	960
CTTTCTGCTT	TAGAAGAAAA	GATTGCCAGA	ATGGTGCCTA	TCAGTGGAAC	TGGTTCTACA	1020
GTTTCTACAA	ATGCAAAACC	TAATGAAGTA	GTGTCTAGTC	TAGGCAGTCT	TTCAAGCAAT	1080
CCTTCTTCTT	TAACGACAAG	TAAGGAGCTC	TCTTCAGCAT	CTGATGGTTA	TATTTTTAAT	1140
CCAAAAGATA	TCGTTGAAGA	AACGGCTACA	GCTTATATTG	TAAGACATGG	TGATCATTTC	1200
CATTACATTC	CAAAATCAAA	TCAAATTGGG	CAACCGACTC	TTCCAAACAA	TAGTCTAGCA	1260
ACACCTTCTC	CATCTCTTCC	AATCAATCCA	GGAACTTCAC	ATGAGAAACA	TGAAGAAGAT	1320
GGATACGGAT				AATCAGGTTT	TGTCATGAGT	1380
	ACAATCATTA	TTTCTTCAAG	AAGGACTTGA	CAGAAGAGCA	AATTAAGGTG	1440
CGCAAAAACA	TTTAG (SE	Q ID NO: 7)				1455

MKFSKKYIAA	GSAVIVSLSL	CAYALNOHRS	QENKDNNRVS	YVDGSQSSQK	50
SENLTPDQVS	QKEGIQAEQI	VIKITDQGYV	TSHGDHYHYY	NGKVPYDALF	100
	YQLKDADIVN				150
	VKDNEKVNSN				200
	YIPKSDLSAS				250
	PANKSENLQS				300
	DHYHFIPYSK				350
	PSSLTTSKEL				400
	QPTLPNNSLA			GYGFDANRII	450
AEDESGFVMS	HGDHNHYFFK	KDLTEEQIKV	RKNI (SEC	ID NO: 8)	484

ATGAAAGATT TAGATA	AAAA AATCGAAGAA	AAAATTGCTG	GCATTATGAA	ACAATATGGT	60
GTCAAACGTG AAAGTA	ATTGT CGTGAATAAA	GAAAAAAATG	CGATTATTTA	TCCGCATGGA	120
GATCACCATC ATGCAC	SATCC GATTGATGAA	CATAAACCGG	TTGGAATTGG	TCATTCTCAC	180
AGTAACTATG AACTG	TTTAA ACCCGAAGAA	GGAGTTGCTA	AAAAAGAAGG	GAATAAAGTT	240
TATACTGGAG AAGAAT	TTAAC GAATGTTGTT	AATTTGTTAA	AAAATAGTAC	GTTTAATAAT	300
CAAAACTTTA CTCTAG	CCAA TGGTCAAAAA	CGCGTTTCTT	TTAGTTTTCC	GCCTGAATTG	360
GAGAAAAAAT TAGGTA	ATCAA TATGCTAGTA	AATTAATAA	CACCAGATGG	AAAAGTATTG	420
GAGAAAGTAT CTGGTA	AAGT ATTTGGAGAA	GGAGTAGGGA	ATATTGCAAA	CTTTGAATTA	480
GATCAACCTT ATTTAC	CAGG ACAAACATTT	AAGTATACTA	TCGCTTCAAA	AGATTATCCA	540
GAAGTAAGTT ATGATG	GTAC ATTTACAGTT	CCAACCTCTT	TAGCTTACAA	AATGGCCAGT	600
CAAACGATTT TCTATC	CTTT CCATGCAGGG	GATACTTATT	TAAGAGTGAA	CCCTCAATTT	660
GCAGTGCCTA AAGGAA	CTGA TGCTTTAGTC	AGAGTGTTTG	ATGAATTTCA	TGGAAATGCT	720
TATTTAGAAA ATAACI	ATAA AGTTGGTGAA	ATCAAATTAC	CGATTCCGAA	ATTAAACCAA	780
GGAACAACCA GAACGG	CCGG AAATAAAATT	CCTGTAACCT	TCATGGCAAA	TGCTTATTTG	840
GACAATCAAT CGACTI	ATAT TGTGGAAGTA	CCTATCTTGG	AAAAAGAAAA	TCAAACTGAT	900
	CACA ATTTAAAAGG		AAGAAAACTC	AAAACTTGAT	960
GAAAAGGTAG AAGAAC	CAAA GACTAGTGAG	AAGGTAGAAA	AAGAAAAACT	TTCTGAAACT	1020
	ATTC AACGTTAGAA		CAGTGGATCC	TGTACAAGAA	1080
AAAGTAGCAA AATTTG	CTGA AAGTTATGGG	ATGAAGCTAG	AAAATGTCTT	GTTTAATATG	1140
GACGGAACAA TTGAAT	TATA TTTACCATCA	GGAGAAGTCA	TTAAAAAGAA	TATGGCAGAT	1200
TTTACAGGAG AAGCAC	CTCA AGGAAATGGT	GAAAATAAAC	CATCTGAAAA	TGGAAAAGTA	1260
TCTACTGGAA CAGTTG	AGAA CCAACCAACA	GAAAATAAAC	CAGCAGATTC	TTTACCAGAG	1320
GCACCAAACG AAAAAC	CTGT AAAACCAGAA	AACTCAACGG	ATAATGGAAT	GTTGAATCCA	1380
GAAGGGAATG TGGGGA	GTGA CCCTATGTTA	GATCCAGCAT	TAGAGGAAGC	TCCAGCAGTA	1440
GATCCTGTAC AAGAAA		ACAGCTAGTT	ACGGATTAGG	CTTAGATAGT	1500
GTTATATTCA ATATGG		TTAAGATTGC	CAAGTGGAGA	AGTGATAAAA	1560
AAGAATTTAT CTGATT	TCAT AGCGTAA	(SEQ ID NO): 9)		1587

FIG. 9

MKDLDKKIEE	KIAGIMKQYG	VKRESIVVNK	EKNAIIYPHG	DHHHADPIDE	50
HKPVGIGHSH	SNYELFKPEE	GVAKKEGNKV	YTGEELTNVV	NLLKNSTFNN	100
QNFTLANGQK	RVSFSFPPEL	EKKLGINMLV	KLITPDGKVL	EKVSGKVFGE	150
GVGNIANFEL	DQPYLPGQTF	KYTIASKDYP	EVSYDGTFTV	PTSLAYKMAS	200
QTIFYPFHAG	DTYLRVNPQF	AVPKGTDALV	RVFDEFHGNA	YLENNYKVGE	250
IKLPIPKLNQ	GTTRTAGNKI	PVTFMANAYL	DNQSTYIVEV	PILEKENQTD	300
	NKAQENSKLD				350
EVPTVDPVQE	KVAKFAESYG	MKLENVLFNM	DGTIELYLPS	GEVIKKNMAD	400
FTGEAPQGNG	ENKPSENGKV	STGTVENQPT	ENKPADSLPE	APNEKPVKPE	450
NSTDNGMLNP	EGNVGSDPML	DPALEEAPAV	DPVQEKLEKF	TASYGLGLDS	500
VIFNMDGTIE	LRLPSGEVIK	KNLSDFIA	(SEQ ID NO:	10)	528

BVH3	WU2	1	CAYALNQHRSQENKDNNRVSYVDGSQSSQKSENLTPDQVSQKEGIQAEQIVIKITDQGYV	60
BVH3		1	CAYALNQHRSQENKDNNRVSYVDGSQSSQKSENLTPDQVSQKEGIQAEQIVIKITDQGYV	60
	JNR7/87		CAYALNQHRSQENKDNNRVSYVDGSQSSQKSENLTPDQVSQKEGIQAEQIVIKITDQGYV	60
	SP64		CAYALNQHRSQENKDNNRVSYVDGSQSSQKSENLTPDQVSQKEGIQAEQIVIKITDQGYV	60
	P4241		CAYALNQHRSQENKDNNRVSYVDGSQSSQKSENLTPDQVSQKEGIQAEQIVIKITDQGYV	60
винз	A66	1	CAYALNQHRSQENKDNNRVSYVDGSQSSQKSENLTPDQVSQKEGIQAEQIVIKITDQGYV	60
вунз	พบ2	61	TSHGDHYHYYNGKVPYDALFSEELLMKDPNYQLKDADIVNEVKGGYIIKVDGKYYVYLKD	120
BVH3			TSHGDHYHYYNGKVPYDALFSEELLMKDPNYQLKDADIVNEVKGGYIIKVDGKYYVYLKD	120
	JNR7/87		TSHGDHYHYYNGKVPYDALFSEELLMKDPNYQLKDADIVNEVKGGYIIKVDGKYYVYLKD	120
	SP64		TSHGDHYHYYNGKVPYDALFSEELLMKDPNYQLKDADIVNEVKGGYIIKVDGKYYVYLKD	120
винз	P4241		TSHGDHYHYYNGKVPYDALFSEELLMKDPNYOLKDADIVNEVKGGYIIKVDGKYYVYLKD	120
BVH3	A66	61	TSHGDHYHYYNGKVPYDALFSEELLMKDPNYQLKDADIVNEVKGGYIIKVDGKYYVYLKD	120

BVH3			AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDTGNA	180
BVH3	JNR7/87		AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDTGNA	180
	SP64		AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDTGNA AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDTGNA	180
	P4241		AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDTGNA AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDTGNA	180
BVH3			AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRITINDGIVFNPADIIEDIGNA AAHADNVRTKDEINRQKQEHVKDNEKVNSNVAVARSQGRYTTNDGYVFNPADIIEDIGNA	180 180
			**************************************	100
BVH3	WU2	181	YIVPHRGHYHYIPKSDLSASELAAAKAHLAGKNMQPSQLSYSSTASDNNTQSVAKGSTSK	240
BVH3	RX1	181	YIVPHGGHYHYIPKSDLSASELAAAKAHLAGKNMQPSQLSYSSTASDNNTQSVAKGSTSK	240
	JNR7/87	181	YIVPHGGHYHYIPKSDLSASELAAAKAHLAGKNMQPSQLSYSSTASDNNTQSVAKGSTSK	240
	SP64	181	YIVPHGGHYHYIPKSDLSASELAAAKAHLAGKNMQPSQLSYSSTASDNNTQSVAKGSTSK	240
	P4241		YIVPHRGHYHYIPKSDLSASELAAAKAHLAGKNMQPSQLSYSSTASDNNTQSVAKGSTSK	240
BVH3	A66	181	YIVPHRGHYHYIPKSDLSASELAAAKAHLAGKNMQPSQLSYSSTASDNNTQSVAKGSTSK	240
			***** *********	
вунз	WU2	241	PANKSENLQSLLKELYDSPSAQRYSESDGLVFDPAKIISRTPNGVAIPHGDHYHFIPYSK	300
BVH3		241	PANKSENLQSLLKELYDSPSAQRYSESDGLVFDPAKIISRTPNGVAIPHGDHYHFIPYSK	300
	JNR7/87	241	PANKSENLQSLLKELYDSPSAQRYSESDGLVFDPAKIISRTPNGVAIPHGDHYHFIPYSK	300
винз	SP64		PANKSENLQSLLKELYDSPSAQRYSESDGLVFDPAKIISRTPNGVAIPHGDHYHFIPYSK	300
	P4241	241	PANKSENLQSLLKELYDSPSAQRYSESDGLVFDPAKIISRTPNGVAIPHGDHYHFIPYSK	300
винз	A66		PANKSENLQSLLKELYDSPSAQRYSESDGLVFDPAKIISRTPNGVAIPHGDHYHFIPYSK	300

במעם	tan o	201	I CALIPOUTA DIGITA CONCENTRATION VINCENTRATION VINCENTRATI	
BVH3 BVH3		301	LSALEEKIARMVPISGTGSTVSTNAKPNEVVSSLGSLSSNPSSLTTSKELSSASDGYIFN	360
	JNR7/87	301	LSALEEKIARRVPISGTGSTVSTNAKPNEVVSSLGSLSSNPSSLTTSKELSSASDGYIFN LSALEEKIARMVPISGTGSTVSTNAKPNEVVSSLGSLSSNPSSLTTSKELSSASDGYIFN	360
BVH3		301	LSALEEKIARMVPISGTGSTVSTNAKPNEVVSSLGSLSSNPSSLTTSKELSSASDGYIFN	360
	P4241	301	LSALEEKIARMVPISGTGSTVSTNAKPNEVVSSLGSLSSNPSSLTTSKELSSASDGYIFN	360 360
BVH3	A66	301	LSALEEKIARMVPISGTGSTVSTNAKPNEVVSSLGSLSSNPSSLTTSKELSSASDGYIFN	360
			******** *************	300
BVH3		361	PKDIVEETATAYIVRHGDHFHYIPKSNQIGQPTLPNNSLATPSPSLPINPGTSHEKHEED	420
BVH3		361	PKDIVEETATAYIVRHGDHFHYIPKSNQIGQPTLPNNSLATPSPSLPINPGISHEKHEED	420
	JNR7/87	361	PKDIVEETATAYIVRHGDHFHYIPKSNQIGQPTLPNNSLATPSPSLPINPGTSHEKHEED	420
BVH3		361	PKDIVEETATAYIVRHGDHFHYIPKSNQIGQPTLPNNSLATPSPSLPINPGTSHEKHEED	420
BVH3	P4241	361	PKDIVEETATAYIVRHGDHFHYIPKSNQIGQPTLPNNSLATPSPSLPINPGTSHEKHEED	420
DVNJ	400	301	PKDIVEETATAYIVRHGDHFHYIPKSNQIGQPTLPNNSLATPSPSLPINPGTSHEKHEED	420
			·	
винз	WU2	421	GYGFDANRIIAEDESGFVMSHGDHNHYFFKKDLTEEQIKAAQKHLEEVKTSHNGLDSLSS	480
винз		421	GYGFDANRIIAEDESGFIMSHGNHNHYFFKKDLTEEQIKAAQKHLEEVKTSHNGLDSLSS	480
	JNR7/87	421	GYGFDANRIIAEDESGFVMSHGDHNHYFFKKDLTEEQIKAAQKHLEEVKTSHNGLDSLSS	480
винз		421	GYGFDANRIIAEDESGFVMSHGDHNHYFFKKDLTEEQIKAAQKHLEEVKTSHNGLDSLSS	480
	P4241	421	GYGFDANRIIAEDESGFVMSHGDHNHYFFKKDLTEEQIKAAQKHLEEVKTSHNGLDSLSS	480
винз	A66	421	GYGFDANRIIAEDESGFVMSHGDHNHYFFKKDLTEEQIKAAQKHLEEVKTSHNGLDSLSS	480

Inventor(s): Josee Hamel et al.

BVH	3 WU2	481	HEQDYPSNAKEMKDLDKKIEEKIAGIMKQYGVKRESIVVNKEKNAIIYPHGDHHHADPID	540
	3 RX1	481	HEQDYPGNAKEMKDLDKKIEEKIAGIMKQYGVKRESIVVNKEKNAIIYPHGDHHHADPID	540
BVH.	3 JNR7/87	481	HEQDYPSNAKEMKDLDKKIEEKIAGIMKQYGVKRESIVVNKEKNAIIYPHGDHHHADPID	540
BVH	3 SP64	481	HEQDYPGNAKEMKDLDKKIEEKIAGIMKQYGVKRESIVVNKEKNAIIYPHGDHHHADPID	540
BVH	3 P4241	481	HEQDYPSNAKEMKDLDKKIEEKIAGIMKQYGVKRESIVVNKEKNAIIYPHGDHHHADPID	540
BVH:	3 A66	481	HEODYPSNAKEMKDLDKKIEEKIAGIMKOYGVKRESIVVNKEKNAIIVPHGDHHHAADDID	540
			***** ************************	340
	3 WU2	541	EHKPVGIGHSHSNYELFKPEEGVAKKEGNKVYTGEELTNVVNLLKNSTFNNQNFTLANGQ	600
	3 RX1	541	EHKPVGIGHSHSNYELFKPEEGVAKKEGNKVYTGEELTNVVNLLKNSTFNNQNFTLANGQ	600
	3 JNR7/87	541	EHKPVGIGHSHSNYELFKPEEGVAKKEGNKVYTGEELTNVVNLLKNSTFNNQNFTLANGQ	600
	3 SP64 3 P4241	541	EHKPVGIGHSHSNYELFKPEEGVAKKEGNKVYTGEELTNVVNLLKNSTFNNQNFTLANGQ	600
	3 A66	541	EHKPVGIGHSHSNYELFKPEEGVAKKEGNKVYTGEELTNVVNLLKNSTFNNQNFTLANGQ	600
2111.	NOO	341	EHKPVGIGHSHSNYELFKPEEGVAKKEGNKVYTGEELTNVVNLLKNSTFNNQNFTLANGQ	600
B			1	
	3 WU2	601	KRVSFSFPPELEKKLGINMLVKLITPDGKVLEKVSGKVFGEGVGNIANFELDQPYLPGQT	660
	RX1	901	KRVSFSFPPELEKKLGINMLVKLITPDGKVLEKVSGKVFGEGVGNIANFELDQPYLPGQT	660
	3 JNR7/87	601	KRVSFSFPPELEKKLGINMLVKLITPDGKVLEKVSGKVFGEGVGNIANFELDQPYLPGQT	660
	3 SP64	901	KRVSFSFPPELEKKLGINMLVKLITPDGKVLEKVSGKVFGEGVGNIANFELDQPYLPGQT	660
	P4241	601	KRVSFSFPPELEKKLGINMLVKLITPDGKVLEKVSGKVFGEGVGNIANFELDQPYLPGQT	660
винз	3 A66	601	KRVSFSFPPELEKKLGINMLVKLITPDGKVLEKVSGKVFGEGVGNIANFELDQPYLPGQT	660

винз	WU2	661	FKYTIASKDYPEVSYDGTFTVPTSLAYKMASQTIFYPFHAGDTYLRVNPQFAVPKGTDAL	720
винз	RX1	661	FKYTIASKDYPEVSYDGTFTVPTSLAYKMASQTIFYPFHAGDTYLRVNPQFAVPKGTDAL	720
BVH3	JNR7/87	661	FKYTIASKDYPEVSYDGTFTVPTSLAYKMASQTIFYPFHAGDTYLRVNPQFAVPKGTDAL	720
BVH3	SP64	661	FKYTIASKDYPEVSYDGTFTVPTSLAYKMASQTIFYPFHAGDTYLRVNPQFAVPKGTDAL	720
BVH3	P4241	661	FKYTIASKDYPEVSYDGTFTVPTSLAYKMASQTIFYPFHAGDTYLRVNPQFAVPKGTDAL	720
BVH3	A66	661	FKYTIASKDYPEVSYDGTFTVPTSLAYKMASOTIFYPFHAGDTYLRVNPOFAVPKGTDAI.	720
			*************	, 20
винз	พับว	721	VDVPDFFUCNAVI PANAVAVCETAL DI DAL NOCEEDE COMPANIO	
BVH3		721	VRVFDEFHGNAYLENNYKVGEIKLPIPKLNQGTTRTAGNKIPVTFMANAYLDNQSTYIVE	780
	JNR7/87	721	VRVFDEFHGNAYLENNYKVGEIKLPIPKLNQGTTRTAGNKIPVTFMANAYLDNQSTYIVE VRVFDEFHGNAYLENNYKVGEIKLPIPKLNQGTTRTAGNKIPVTFMANAYLDNQSTYIVE	780
	SP64	721	VRVFDEFHGNAYLENNYKVGEIKLPIPKLNQGTTRTAGNKIPVTFMANAYLDNQSTYIVE	780
	P4241	721	VRVFDEFHGNAYLENNYKVGEIKLPIPKLNQGTTRTAGNKIPVTFMANAYLDNQSTYIVE	780
BVH3		721	VRVFDEFHGNAYLENNYKVGEIKLPIPKLNQGITKTAGNKIPVTFMANAYLDNQSTYIVE	780
			**************************************	780
винз	WII2	781	White Promoter and the promoter of the promote	
BVH3	,	781	VPILEKENQTDKPSILPQFKRNKAQENSKFDEKVEEPKTSEKVEKEKLSETGNSTSNSTL	840
	JNR7/87	781	VPILEKENQTDKPSILPQFKRNKAQENSKLDEKVEEPKTSEKVEKEKLSETGNSTSNSTL VPILEKENQTDKPSILPQFKRNKAQENLKLDEKVEEPKTSEKVEKEKLSETGNSTSNSTL	840
	SP64	781	VPILEKENQTDKPSILPQFKRNKAQENSKLDEKVEEPKTSEKVEKEKLSETGNSTSNSTL	840
	P4241	781	VPILEKENQTDKPSILPQFKRNKAQENSKFDEKVEEPKTSEKVEKEKLSETGNSTSNSTL	840
BVH3	A66	781	VPILEKENQTDKPSILPQFKRNKAQENSKFDEKVEEPKTSEKVEKEKLSETGNSTSNSTL	840
			**************************************	840
винз	WI12	Q./ 1	PEUDTUDUGEVUA VIDA FOVOVIVA DAVIA DAVIA	
BVH3		041	EEVPTVDPVQEKVAKFAESYGMKLENVLFNMDGTIELYLPSGEVIKKNMADFTGEAPQGN	900
	JNR7/87	041	EEVPTVDPVQEKVAKFAESYGMKLENVLFNMDGTIELYLPSGEVIKKNMADFTGEAPQGN	900
BVH3		841	EEVPTVDPVQEKVAKFAESYGMKLENVLFNMDGTIELYLPSGEVIKKNMADFTGEAPQGN	900
	P4241	841	EEVPTVDPVQEKVAKFAESYGMKLENVLFNMDGTIELYLPSGEVIKKNMADFTGEAPQGN	900
BVH3		9/1	EEVPTVDPVQEKVAKFAESYGMKLENVLFNMDGTIELYLPSGEVIKKNMADFTGEAPQGN	900
		011	EEVPTVDPVQEKVAKFAESYGMKLENVLFNMDGTIELYLPSGEVIKKNMADFTGEAPQGN	900
ריינום	MITO	00:		
BVH3 BVH3		201	GENKPSENGKVSTGTVENOPTENKPADSLPEAPNEKPVKPENSTDNGMLNPEGNVGSDPM	960
		901	GENKPSENGKVSTGTVENQPTENKPADSLPEAPNEKPVKPENSTDNGMLNPEGNVGSDPM	960
BVH3	JNR7/87	901 10E	GENKPSENGKVSTGTVENQPTENKPADSLPEAPNEKPVKPENSTDNGMLNPEGNVGSDPM	960
	P4241	301 901	GENKPSENGKVSTGTVENQPTENKPADSLPEAPNEKPVKPENSTDNGMLNPEGNVGSDPM	960
BVH3		901	GENKPSENGKVSTGTVENQPTENKPADSLPEAPNEKPVKPENSTDNGMLNPEGNVGSDPM	960
		201	GENKPSENGKVSTGTVENQPTENKPADSLPEAPNEKPVKPENSTDNGMLNPEGNVGSDPM	960
רוווום	MII O	•		
BVH3		301	LDPALEEAPAVDPVQEKLEKFTASYGLGLDSVIFNMDGTIELRLPSGEVIKKNLSDLIA 10	19
BVH3		901	LDPALEEAPAVDPVQEKLEKFTASYGLGLDSVIFNMDGTIELRLPSGEVIKKNLSDLIA 10	19
	JNR7/87	901 .	LDPALEEAPAVDPVQEKLEKFTASYGLGLDSVIFNMDGTIELRLPSGEVIKKNLSDLIA 10	19
BVH3	P4241	901	LDPALEEAPAVDPVQEKLEKFTASYGLGLDSVIFNMDGTIELRLPSGEVIKKNLSDFIA 10	19
BVH3		301	LDPALEEAPAVDPVQEKLEKFTASYGLGLDSVIFNMDGTIELRLPSGEVIKKNLSDLIA 10	19
CHAM	A00	301 .	LDPALEEAPAVDPVQEKLEKFTASYGLGLDSVIFNMDGTIELRLPSGEVIKKNLSDLIA 10	19
			·····	

BVH11 WU2

BVH11 SP63

BVH11 SP64

BVH11 JNR7/87

BVH11 A66 BVH11 Rx1

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BVH11-2 SP64
                   1 CSYELGRHQAGQVKKESNRVSYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY 60
 BVH11-2 JNR7/87
                  1 CSYELGRHQAGQVKKESNRVSYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
 BVH11-2 P4241
                   1 CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
 BVH11-2 A66
                   1 CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
 BVH11-2 WU2
                   1 \  \  \text{CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY}
                                                                                   60
 BVH11-2 Rx1
                 1 CSYELGRHQAGQVKKESNRVSYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
               1 CSYELGRHQAGQVKKESNKVSIIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
1 CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
 BVH11 P4241
 BVH11 WU2
                  1 CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
                                                                                   60
 BVH11 A66
                  1 CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
 BVH11 Rx1
                   1 CSYELGRHQAGQVKKESNRVSYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
                                                                                   60
 BVH11 JNR7/87
                   {\tt 1 CSYELGRHQAGQDKKESNRVAYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY}
                                                                                   60
 BVH11 SP63
                  1 CSYELGRHQAGQVKKESNRVSYIDGDQAGQKAENLTPDEVSKREGINAEQIVIKITDQGY
 BVH11 SP64
                  1 CAYELGLHQA-QTVKENNRVSYIDGKQATQKTENLTPDEVSKREGINAEQIVIKITDQGY
                     BVH11-2 SP64
                  61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVDGKYYVYLK 120
 BVH11-2 JNR7/87 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVDGKYYVYLK 120
 BVH11-2 P4241
                  61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 120
 BVH11-2 A66
                 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 120
 BVH11-2 WU2
                 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 120
 BVH11-2 Rx1
                61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVDGKYYVYLK 120
                 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 120
 BVH11 P4241
 BVH11 WU2
                 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYGYLK 120
 BVH11 A66
                 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 120
 BVH11 Rx1
                61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVDGKYYVYLK 120
BVH11 JNR7/87 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 120
BVH11 SP63 61 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVDGKYYVYLK 120
                 60 VTSHGDHYHYYNGKVPYDAIISEELLMKDPNYQLKDSDIVNEIKGGYVIKVNGKYYVYLK 119
BVH11-2 SP64
                121 DAAHADNIRTKEEIKRQKQEHSHNHNSRA---DNAVAAARAQGRYTTDDGYIFNASDIIE 177
BVH11-2 JNR7/87 121 DAAHADNIRTKEEIKRQKQEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11-2 P4241 121 DAAHADNIRTKEEIKRQKQEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11-2 A66
                121 DAAHADNIRTKEEIKRQRQEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11-2 WU2
                121 DAAHADNIRTKEEIKRQKQEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11-2 RX1 121 DAAHADNIRTKEEIKRQKQERSHNHNSRA---DNAVAAARAQGRYTTDDGYIFNASDIIE 177
BVH11 P4241 121 DAAHADNIRTKEEIKRQKQEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11 WU2
              121 DAAHADNIRTKEEIKRQKQEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11 A66
               121 DAAHADNIRTKEEIKROKOEHSHNHGGGSN--DQAVVAARAQGRYTTDDGYIFNASDIIE 178
BVH11 Rx1
                121 DAAHADNIRTKEEIKRQKQERSHNHNSRA---DNAVAAARAQGRYTTDDGYIFNASDIIE 177
               121 DAAHADNIRTKEEIKRQKQERSHNHNSRA---DNAVAAARAQGRYTTDDGYIFNASDIIE 177
BVH11 JNR7/87
BVH11 SP63
                121 DAAHADNIRTKEEIKROKOERSHNHNSRA---DNAVAAARAOGRYTTDDGYIFNASDIIE 177
                120 DAAHADNVRTKEEINRQKQEHSQHREGGTSANDGAVAFARSQGRYTTDDGYIFNASDIIE 179
BVH11 SP64
                    BVH11-2 SP64
                178 DTGDAYIVPHGDHYHYIPKNELSASELAAAEAYWNGKQGSRPSSSSSYNANPVQPRLSEN 237
BVH11-2 JNR7/87 179 DTGDAYIVPHGDHYHYIPKNELSASELAAAEAYWNGKQGSRPSSSSSYNANPAQPRLSEN 238
BVH11-2 P4241 179 DTGDAYIVPHGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 238
BVH11-2 A66
                179 DTGDAYIVPHGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 238
BVH11-2 WU2
               179 DTGDAYIVPRGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 238
BVH11-2 Rx1
              178 DTGDAYIVPHGDHYHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 237
BVH11 P4241
               179 DTGDAYIVPHGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 238
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179 DTGDAYIVPHGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 238

179 DTGDAYIVPHGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 238

178 DTGDAYIVPHGDHYHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 237

178 DTGDAYIVPHGDHYHYIPKNELSASELAAAEAYWNGKQGSRPSSSSSYNANPAQPRLSEN 237

178 DTGDAYIVPHGNHFHYIPKSDLSASELAAAQAYWNGKQGSRPSSSSSHNANPAQPRLSEN 237

180 DTGDAYIVPHGDHYHYIPKNELSASELAAAEAFLSGRENLSNLRTYRRQNSDNTPRTNWV 239

Inventor(s): Josee Hamel et al.

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BVH11-2 SP64
                238 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 285
BVH11-2 JNR7/87 239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 286
BVH11-2 P4241 239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 286
                239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 286
BVH11-2 A66
                239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERRVESDGLIFDPAQITS 286
BVH11-2 WU2
                238 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 285
BVH11-2 Rx1
BVH11 P4241
                239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 286
                239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 286
BVH11 WU2
                239 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 286
BVH11 A66
                238 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 285
BVH11 Rx1
BVH11 JNR7/87
                238 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 285
                238 HNLTVTPTYHQN------QGENISSLLRELYAKPLSERHVESDGLIFDPAQITS 285
BVH11 SP63
                240 PSVSNPGTTNTNTSNNSNTNSQASQSNDIDSLLKQLYKLPLSQRHVESDGLIFDPAQITS 299
BVH11 SP64
                                         * * *** ** *** ********
BVH11-2 SP64
                286 RTARGVAVPHGNHYHFIPYEQMSELEKRIARIIPLRYRSNHWVPDSRPEQPSPQSTPEPS 345
BVH11-2 JNR7/87 287 RTARGVAVPHGNHYHFIPYEQMSELEKRIARIIPLRYRSNHWVPDSRPEQPSPQSTPEPS 346
                287 RTARGVAVPHGNHYHFIPYEQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQ----PS 342
BVH11-2 P4241
                287 RTARGVAVPHGNHYHFIPYEQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQ----PS 342
BVH11-2 A66
                287 RTARGVAVPHGNHYHFIPYEQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQ----PS 342
BVH11-2 WU2
BVH11-2 Rx1
                286 RTANGVAVPHGDHYHFIPYSQLSPLEEKLARIIPLRYRSNHWVPDSRPEQPSPQSTPEPS 345
BVH11 P4241
                287 RTARGVAVPHGNHYHFIPYEQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQ----PS 342
BVH11 WU2
               287 RTARGVAVPHGNHYHFIPYEQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQ----PS 342
BVH11 A66
               287 RTARGVAVPHGNHYHFIPYEQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQ----PS 342
               286 RTANGVAVPHGDHYHFIPYSQLSPLEEKLARIIPLRYRSNHWVPDSRPEQPSPQSTPEPS 345
BVH11 Rx1
BVH11 JNR7/87
               286 RTARGVAVPHGNHYHFIPYEQMSELEKRIARIIPLRYRSNHWVPDSRPEEPSPQPTPEPS 345
BVH11 SP63
               286 RTARGVAVPHGNHYHFIPYSQMSELEERIARIIPLRYRSNHWVPDSRPEQPSPQSTPEPS 345
BVH11 SP64
                300 RTARGVAVPHGNHYHFIPYEQMSELEKRIARIIPLRYRSNHWVPDSRPEEPSPQPTPEPS 359
                    BVH11-2 SP64
               346 PSLQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 405
BVH11-2 JNR7/87 347 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 406
BVH11-2 P4241
               343 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 402
BVH11-2 A66
               343 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 402
BVH11-2 WU2
               343 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 402
BVH11-2 Rx1
               346 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVPRYIPAKDLSAETAAGIDSK 405
               343 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 402
BVH11 P4241
BVH11 WU2
               343 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 402
BVH11 A66
               343 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 402
BVH11 Rx1
               346 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVPRYIPAKDLSAETAAGIDSK 405
               346 PSP-----QPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKDLSAETAAGIDSK 399
BVH11 JNR7/87
BVH11 SP63
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BVH11 SP64
               360 PSPQPAPNPQPAPSNPIDEKLVKEAVRKVGDGYVFEENGVSRYIPAKNLSAETAAGIDSK 419
                            ***********
BVH11-2 SP64
               406 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEVLDNLLERL 465
BVH11-2 JNR7/87 407 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 466
BVH11-2 P4241
               403 LAKQESLSHKLGTKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 462
BVH11-2 A66
               403 LAKQESLSHKLGTKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 462
               403 LAKQESLSHKLGTKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 462
BVH11-2 WU2
BVH11-2 Rx1
               406 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 465
BVH11 P4241
               403 LAKQESLSHKLGTKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 462
BVH11 WU2
               403 LAKQESLSHKLGTKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 462
BVH11 A66
               403 LAKQESLSHKLGTKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 462
               406 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 465
BVH11 Rx1
BVH11 JNR7/87
               400 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 459
BVH11 SP63
               406 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 465
BVH11 SP64
               420 LAKQESLSHKLGAKKTDLPSSDREFYNKAYDLLARIHQDLLDNKGRQVDFEALDNLLERL 479
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Inventor(s): Josee Hamel et al.

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BVH11-2 SP64
                466 KDVSSDKVKLVDDILAFLAPIRHPERLGKPNAQITYTDDEIOVAKLAGKYTTEDGYIFDP 525
BVH11-2 JNR7/87 467 KDVPSDKVKLVDDILAFLAPIRHPERLGKPNAQITYTDDEIQVAKLAGKYTTEDGYIFDP 526
BVH11-2 P4241
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BVH11-2 A66
                463 KDVSSDKVKLVEDILAFLAPIRHPERLGKPNSQITYTDDEIQVAKLAGKYTTEDGYIFDP 522
BVH11-2 WU2
                463 KDVSSDKVKLVEDILAFLAPIRHPERLGKPNSQITYTDDEIQVAKLAGKYTTEDGYIFDP 522
BVH11-2 Rx1
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BVH11 P4241
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BVH11 WU2
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BVH11 A66
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BVH11 Rx1
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BVH11 JNR7/87
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BVH11 SP63
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BVH11 SP64
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                     BVH11-2 SP64
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BVH11-2 JNR7/87 527 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 586
                523 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHRDSGNTEAK 582
BVH11-2 P4241
BVH11-2 A66
                523 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 582
BVH11-2 WU2
                523 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 582
BVH11-2 Rx1
                526 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 585
              523 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 582
BVH11 P4241
              523 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 582
BVH11 WU2
BVH11 A66
              523 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 582
BVH11 Rx1
               526 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 585
BVH11 JNR7/87 520 RDITSDEGDAYVTPHMTHSHWIKKDSLSEAERAAAQAYAKEKGLTPPSTDHQDSGNTEAK 579
BVH11 SP63
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BVH11 SP64
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                    *************
BVH11-2 SP64
                586 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 645
BVH11-2 JNR7/87 587 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 646
BVH11-2 P4241
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BVH11-2 A66
                583 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 642
BVH11-2 WU2
                583 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 642
BVH11-2 Rx1 586 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 645
BVH11 P4241 583 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 642
              583 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 642
BVH11 WU2
BVH11 A66 583 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 642
BVH11 Rx1 586 GAEAIYNRVKAAKKVPLDRMPYNLOYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 645
                586 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 645
BVH11 JNR7/87
                580 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 639
BVH11 SP63
               586 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 645
BVH11 SP64
                600 GAEAIYNRVKAAKKVPLDRMPYNLQYTVEVKNGSLIIPHYDHYHNIKFEWFDEGLYEAPK 659
BVH11-2 SP64
                646 GYSLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK-----ADQDSK 690
BVH11-2 JNR7/87 647 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK------VDQDSK 691
                643 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK------ADQDSK 687
BVH11-2 P4241
BVH11-2 A66
                643 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK------ADQDSK 687
BVH11-2 WU2
               643 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK-----ADQDSK 687
              646 GYSLEDLLATVKYYVEHPNERPHSDNGFGNASDHVQRNKNGQADTNQTEKPNEEKPQTEK 705
BVH11-2 Rx1
              643 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK------ADQDSK 687
BVH11 P4241
              643 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK------ADQDSK 687
BVH11 WU2
              643 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVRKNK------ADQDSK 687
BVH11 A66
BVH11 Rx1
              646 GYSLEDLLATVKYYVEHPNERPHSDNGFGNASDHVQRNK-----NGQ 687
BVH11 JNR7/87 640 GYSLEDLLATVKYYVEHPNERPHSDNGFGNASDHVQRNK-----NGQ 681
BVH11 SP63 646 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVQRNK-----NGQ 687
BVH11 SP64 660 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVQRNK-----NGQ 701
BVH11 SP64
               660 GYTLEDLLATVKYYVEHPNERPHSDNGFGNASDHVQRNK-----NGQ 701
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BVH11-2 SP64
                691 PDEDKEHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 750
BVH11-2 JNR7/87 692 PDEDKEHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 751
                688 PDEDKGHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 747
BVH11-2 P4241
                688 PDEDKGHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 747
BVH11-2 A66
BVH11-2 WU2
                688 PDEDKGHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 747
BVH11-2 Rx1
                706 PEEDKEHDEVSEPTHPESDEKENHVGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 765
BVH11 P4241
                688 PDEDKGHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 747
BVH11 WU2
                688 PDEDKGHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 747
BVH11 A66
                688 PDEDKGHDEVSEPTHPESDEKENHAGLNPSADNLYKPSTDTEETEEEAEDTTDEAEIPQV 747
BVH11 Rx1
                688 ADTNQTEKPNEEKPQTEKPEEETPREEKPQSEKPESPKPTEEPEEESPEESEEPQV 747
BVH11 JNR7/87
                682 ADTNOTEKPNEEKPOTEKPEEETPREEKPOSEKPESPKPTEEPEEESPEESPEESEEPOV 741
BVH11 SP63
                688 ADTNOTEKPSEEKPOTEKPEEETPREEKPOSEKPESP----KPTEEPEEESPEESEEPQV 743
BVH11 SP64
                702 ADTNQTEKPSEEKPQTEKPEEETPREEKPQSEKPESP----KPTEEPEEESPEESEEPQV 757
                               * . * * *. * . . *
                                                               ** *.. .*.* ***
BVH11-2 SP64
                751 ENSVINAKIADAEALLEKUTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 810
BVH11-2 JNR7/87 752 ENSVINAKIADAEALLEKVTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 811
BVH11-2 P4241
               748 EHSVINAKIADAEALLEKVTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 807
BVH11-2 A66
                748 EHSVINAKIADAEALLEKVTDPSIRONAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 807
BVH11-2 WU2
                748 EHSVINAKIADAEALLEKVTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 807
BVH11-2 Rx1
                766 EYSVINAKIAEAEALLEKVTDSSIRQNAVETLTGLKSSLLLGTKDNNTISAEVDSLLALL 825
BVH11 P4241
               748 EHSVINAKIADAEALLEKVTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 807
BVH11 WU2
               748 EHSVINAKIADAEALLEKVTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 807
BVH11 A66
               748 EHSVINAKIADAEALLEKVTDPSIRQNAMETLTGLKSSLLLGTKDNNTISAEVDSLLALL 807
               748 ETEKVKEKLREAEDLLGKIQNPIIKSNAKETLTGLKNNLLFGTQDNNTIMAEAEKLLALL 807
BVH11 Rx1
BVH11 JNR7/87 742 ETEKVKEKLREAEDLLGKIQNPIIKSNAKETLTGLKNNLLFGTQDNNTIMAEAEKLLALL 801
             744 ETEKVEEKLREAEDLLGKIQDPIIKSNAKETLTGLKNNLLFGTQDNNTIMAEAEKLLALL 803
BVH11 SP63
BVH11 SP64
               758 ETEKVEEKLREAEDLLGKIQDPIIKSNAKETLTGLKNNLLFGTQDNNTIMAEAEKLLALL 817
                       BVH11-2 SP64
               811 KESQPAPIQ 819
BVH11-2 JNR7/87 812 KESQPAPIQ 820
BVH11-2 P4241 808 KKSQPAPIQ 816
BVH11-2 A66
               808 KKSQPAPIQ 816
           808 KKSQPAPIQ 816
826 KESQPAPIQ 834
808 KESK 811
BVH11-2 WU2
BVH11-2 Rx1
BVH11 P4241
BVH11 WU2
             808 KESK
                             811
BVH11 A66
               808 KESK
            808 KESK
BVH11 Rx1
                          811
BVH11 JNR7/87 802 KESK
                             805
BVH11 SP63
               804 KESK
                             807
BVH11 SP64
               818 KESK
                             821
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Inventor(s): Josee Hamel et al.

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	RVH11	SP64	BVH11-2	SP64	RVH11	SP63	BVH11	JNR.7/87	BVH11-2	JNR.7/87	BVH11	WU2	BVH11-2	WU2	BVH11	99Y	BVH11-2	A66	BVH11	P4241	BVH11-2	P4241	DV/II11
BVH11-2	1.81%	%5% S	1 94%	8 95%	7 80%	S 91%	I 88%	%06 S	I 94%	8 95%	1 92%	S 94%	I 93%	S 95%	I 92%	S 94%	I 93%	S 95%	I 92%	S 94%	I 93%	S 95%	1 010/
BVH11 Rx-1	1 88%	S 91%	1 87%	%06 S	%/61	%26 S	%96 I	%96 S	187%	%06 S	I 87%	S 91%	1 86%	%06 S	1 87%	S 91%	. %98 I	%06 S	%L8 I	S 91%	%98 I	%06 S	
BVH11-2 BVH1 P4241 Rx-1	%08 I	S 85%	%96 I	%16 S	%L81	%06 S	%98 I	%06 S	1 97%	%86 S	%86 I	%86 S	%66 I	%66 S	%66 I	%66 S	%66 I	%66 S	%66 I	%66 S		· -	
BVH11 P4241	%08 I	S 85%	I 95%	%96 S	%88 I	S 91%	I 87%	S 91%	%96 I	S 97%	%66 I	%66 S	%86 I	%86 S	I 100%		%66 I	%66 S					
BVH11-2 BVH11 A66 P4241	1 80%	S 85%	1 96%	8 97%	187%	%06 S	%98 I	%06 S	% <i>L</i> 6 I	%86 S	%86 I	%86 S	%66 I	%66 S	%66 I	%66 S							
BVH11 A66	I 80%	S 85%	1 95%	%96 S	7 88% I	S 91%	%L8 I	S 91%	%96 I	S 97%	1 92%	S 94%	%86 I	%86 S									
BVH11-2 BVH11 WU2 A66	%08 I	S 85%	%96 I	S 97%	%L8 I	%06 S	1 86%	S 90%	%/6 I	%86 S	%86 I	S 98%											
BVH11 WU2	%08 I	S 85%	%56 I	%96 S	%88 I	S 91%	187%	S 91%	%96 I	S 97%		•											
BVH11 BVH11-2 JNR.7/87 JNR.7/87	I 82%	S 87%	%86 I	S 98%	%88 I	S 91%	% I 8 1 %	S 90%															
BVH11 JNR.7/87	%88 I	S 91%	I 87%	S 90%	N96 I	%96 S		٠															
BVH11 SP63	%88 I	%06 S	%/8 I	8 90%																			
BVH11-2 BVH11 SP64 SP63	I 81%	%98 S																					

FIG. 13

AATTCCTTGT	CGGGTAAGTT	CCGACCCGCA	CGAAAGGCG1	AATGATTTG	GCACTGTCTC	60
AACGAGAGAC	C TCGGTGAAA1	TTTAGTACCT	GTGAAGATGO	CAGGTTACCCG	CGACAGGACG	120
GAAAGACCCC	: ATGGAGCTTI	ACTGCAGTTT	GATATTGAGT	GTCTGTACCA	CATGTACAGG	180
ATAGGTAGGA	A GTCTAAGAGA	TCGGGACGCC	AGTTTCGAAG	GAGACGCTGT	TGGGATACTA	240
CCCTTGTGTT	ATGGCCACTC	TAACCCAGAT	' AGGTGATCCC	TATCGGAGAC	AGTGTCTGAC	300
GGGCAGTTTG	ACTGGGGCGG	TCGCCTCCTA	AAAGGTAACG	GAGGCGCCCA	AAGGTTCCCT	360
CAGAATGGTI	GGAAATCATI	CGCAGAGTGT	' AAAGGTATAA	GGGAGCTTGA	CTGCGAGAGC	420
TACAACTCGA	GCAGGGACGA	AAGTCGGGCT	TAGTGATCCG	GTGGTTCCGT	ATGGAAGGC	480
CATCGCTCAA	CGGATAAAAG	CTACCCTGGG	GATAACAGGC	TTATCTCCCC	CAAGAGTTCA	540
CATCGACGGG	GAGGTTTGGC	ACCTCGATGT	CGGCTCGTCG	CATCCTGGGG	CTGTAGTCGG	600
TCCCAAGGGI	TGGGCTGTTC	GCCCATTAAA	GCGGCACGCG	AGCTGGGTTC	AGAACGTCGT	660
GAGACAGTTC	GGTCCCTATC	CGTCGCGGGC	GTAGGAAATI	TGAGAGGATC	TGCTCCTAGT	720
ACGAGAGGAC	CAGAGTGGAC	TTACCGCTGG	TGTACCAGTT	GTCTTGCCAA	AGGCATCGCT	780
GGGTAGCTAT	GTAGGGAAGG	GATAAACGCT	GAAAGCATCI	AAGTGTGAAA	CCCACCTCAA	840
GATGAGATTT	CCCATGATTA	TATATCAGTA	AGAGCCCTGA	GAGATGATCA	GGTAGATAGG	900
TTAGAAGTGG	AAGTGTGGCG	ACACATGTAG	CGGACTAATA	CTAATAGCTC	GAGGACTTAT	960
CCAAAGTAAC	TGAGAATATG	AAAGCGAACG	GTTTTCTTAA	ATTGAATAGA	TATTCAATTT	1020
TGAGTAGGTA	TTACTCAGAG	TTAAGTGACG	ATAGCCTAGG	AGATACACCT	GTACCCATGC	1080
CGAACACAGA	AGTTAAGCCC	TAGAACGCCG	GAAGTAGTTG	GGGGTTGCCC	CCTGTGAGAT	1140
AGGGAAGTCG	CTTAGCTCTA	GGGAGTTTAG	CTCAGCTGGG	AGAGCATCTG	CCTTACAAGC	1200
AGAGGGTCAG	CGGTTCGATC	CCGTTAACTC	CCAAAGGTCC	CGTAGTGTAG	CCCTTATCAC	1260
GTCGCCCTGT	CACGGCGAAG	ATCGCGGGTT	CGATTCCCGT	CGGGACCGTT	TAAGGTAACG	1320
CAAGTTATTT	TAGACTCGTT	AGCTCAGTTG	GTAGAGCAAT	ממייידים במסטת י	TCNATCCCTC	1320
ACTGGTTCGA	GCCCAGTACG	GGTCATATAT	GCGGGTTTGG	CCCDDTTCTD	ATCTCTTTGA	1440
AATCATCTTC	TCTCACTTTC	CAAAACTCTA	TTACCTCTTA	TTATACCACA	TTTTCAATCTT	
CAACTTCCCA	GTAATATAAG	CACCTCTGGC	CADACAACTT	TIMINCUMUM	AAAGTAATAA	1500
GTGAATCCAA	TTCAGGAACT	CCAAGAACAA	AAGAAACATC	TCAAIGICCI	AAAGIAAIAA	1560
GGCACAGAGT	CACGTGGTAG	TCTGACCCTA	CCDCDDDTTT	TOGIGICACA	AGIAIIGGAI	1620
GGTTAATTAA	ATGGTTAAAT	AACCGGTTTA	CAAAACTATT	דאיינאר איינאר איינ איינאר איינאר	ACIAITIACI	1680
AGAAAAAACT	TCATCATTTA	TTGAAATGAG	CCATTTATCA	AATAAAGIA	AAAATATATA	1740
GCAGCTGGAT	CAGCTGTTAT	CGTATCCTTG	AGTCTATCTC	CCTATCCACT	ANAMINIAIA	1800
CGTTCGCAGG	AAAATAAGGA	CAATAATCGT	CTCTCTTATC	TCCATCCCAC	CCACTCACAT	1860
CAGAAAAGTG	AAAACTTGAC	ACCAGACCAG	GTCTCTTATG	1 GGA1 GGCAG	CCAGTCAAGT	1920
CAAATTGTAA	TCAAAATTAC	AGATCAGGGC	TATCTATCAGA	CACACCCECA	CCAGGCTGAG	1980
TACTATAATG	GGAAAGTTCC	TTATGATGCC	CUCUUTTACGI	AACAACGGIGA	CCACTATCAT	2040
CCAAACTATC	AACTTAAACA	CGCTGATATT	CTCTTTAGIG	AAGAACTCTT	GATGAAGGAT	2100
AAGGTCGATG	CDDDDDDDDDD	TGTCTACCTG	BARGARGAAG	TCAAGGGTGG	TTATATCATC	2160
ACTAAAGATG	DANTCAATC	TCAAAAACAA	AAAGATGCAG	CTCATGCTGA	TAATGTTCGA	2220
TCTAATCTTC	CTCTTCCATCG	TCAAAAACAA GTCTCAGGGA	GAACATGTCA	AAGATAATGA	GAAGGTTAAC	2280
AATCCAGCTG	TATTATCA	ACATACCCCT	AAMCCOMMANA	CAAATGATGG	TTATGTCTTT	2340
TATCACTACA	TTCCCANAAC	AGATACGGGT CGATTTATCT	AATGCTTATA	TUGTTUCTUA	TGGAGGTCAC	2400
CTGGCTGGAA	DADATATECA	ACCGAGTCAG	GCTAGTGAAT	TAGCAGCAGC	TAAAGCACAT	2460
AACACGCAAT	CTCTACCAAA	AGGATCAACT	ACCARCORATE	CTTCAACAGC	TAGTGACAAT	2520
CAGAGTCTTT	TCAACCAACT	CTATGATTCA	AGCAAGCCAG	CAAATAAATC	TGAAAATCTC	2580
GGCCTGGTCT	TTCACCCTCC	CIAIGATICA	A CONGCOUNT ON C	AACGTTACAG	TGAATCAGAT	2640
CATGGCGACC	ATTACCCIGC	TAAGATTATC	AGTCGTACAC	CAAATGGAGT	TGCGATTCCG	2700
CAIGGCGACC	TOCOMATO	TATTCCTTAC	AGCAAGCTTT	CTGCTTTAGA	AGAAAAGATT	2760
CAACHACH	IGCCTATCAG	TGGAACTGGT	TCTACAGTTT	CTACAAATGC	AAAACCTAAT	2820
CACCECECE	CTAGTCTAGG	CAGTCTTTCA	AGCAATCCTT	CTTCTTTAAC	GACAAGTAAG	2880
GAGCTCTCTT	CAGCATCTGA	TGGTTATATT	TTTAATCCAA	AAGATATCGT	TGAAGAAACG	2940
GCTACAGCTT	ATATTGTAAG	ACATGGTGAT	CATTTCCATT	ACATTCCAAA	ATCAAATCAA	3000
ATTGGGCAAC	CGACTCTTCC	AAACAATAGT	CTAGCAACAC	CTTCTCCATC	TCTTCCAATC	3060
AATCCAGGAA	CTTCACATGA	GAAACATGAA	GAAGATGGAT	ACGGATTTGA	TGCTAATCGT	3120
ATTATCGCTG	AAGATGAATC	AGGTTTTGTC	ATGAGTCACG	GAGACCACAA	TCATTATTTC	3180
1 TCAAGAAGG	ACTTGACAGA	AGAGCAAATT	AAGGCTGCGC	AAAAACATTT	AGAGGAAGTT	3240
AAAACTAGTC	ATAATGGATT	AGATTCTTTG	TCATCTCATG	AACAGGATTA	TCCAGGTAAT	3300
GCCAAAGAAA	TGAAAGATTT	AGATAAAAA	ATCGAAGAAA	AAATTGCTGG	CATTATGAAA	3360
CAATATGGTG	TCAAACGTGA	AAGTATTGTC	GTGAATAAAG	AAAAAAATGC	GATTATTTAT	3420
CLGCATGGAG	ATCACCATCA	TGCAGATCCG	ATTGATGAAC	ATAAACCGGT	TGGAATTGGT	3480
CATTCTCACA	GTAACTATGA	ACTGTTTAAA			AAAAGAAGGG	3540
				4 4		

3 3 ms 3 3 0 mmm						
AATAAAGTTT	ATACTGGAGA	AGAATTAACG	AATGTTGTTA	ATTTGTTAAA	AAATAGTACG	3600
	AAAACTTTAC		GGTCAAAAAC			3660
CCTGAATTGG		AGGTATCAAT				3720
AAAGTATTGG		TGGTAAAGTA	TTTGGAGAAG	GAGTAGGGAA	TATTGCAAAC	3780
TTTGAATTAG			CAAACATTTA	AGTATACTAT	CGCTTCAAAA	3840
	AAGTAAGTTA	TGATGGTACA	TTTACAGTTC	CAACCTCTTT	AGCTTACAAA	3900
ATGGCCAGTC	AAACGATTTT	CTATCCTTTC	CATGCAGGGG	ATACTTATTT	AAGAGTGAAC	3960
CCTCAATTTG		AGGAACTGAT				4020
GGAAATGCTT	ATTTAGAAAA	TAACTATAAA	GTTGGTGAAA	TCAAATTACC	GATTCCGAAA	4080
TTAAACCAAG	GAACAACCAG	AACGGCCGGA	AATAAAATTC	CTGTAACCTT	CATGGCAAAT	4140
GCTTATTTGG	ACAATCAATC	GACTTATATT	GTGGAAGTAC		AAAAGAAAAT	4200
CAAACTGATA	AACCAAGTAT		TTTAAAAGGA		AGAAAACTCA	4260
AAACTTGATG	AAAAGGTAGA	AGAACCAAAG	ACTAGTGAGA	AGGTAGAAAA	AGAAAAACTT	4320
TCTGAAACTG	GGAATAGTAC	TAGTAATTCA	ACGTTAGAAG	AAGTTCCTAC	AGTGGATCCT	4380
GTACAAGAAA	AAGTAGCAAA	ATTTGCTGAA	AGTTATGGGA	TGAAGCTAGA	AAATGTCTTG	4440
TTTAATATGG	ACGGAACAAT	TGAATTATAT		GAGAAGTCAT	TAAAAAGAAT	4500
ATGGCAGATT	TTACAGGAGA	AGCACCTCAA	GGAAATGGTG	AAAATAAACC	ATCTGAAAAT	4560
GGAAAAGTAT	CTACTGGAAC	AGTTGAGAAC	CAACCAACAG	AAAATAAACC	AGCAGATTCT	4620
TTACCAGAGG	CACCAAACGA	AAAACCTGTA	AAACCAGAAA	ACTCAACGGA	TAATGGAATG	4680
TTGAATCCAG	AAGGGAATGT	GGGGAGTGAC	CCTATGTTAG	ATCCAGCATT	AGAGGAAGCT	4740
CCAGCAGTAG	ATCCTGTACA	AGAAAAATTA	GAAAAATTTA	CAGCTAGTTA	CGGATTAGGC	4800
TTAGATAGTG		TATGGATGGA		TAAGATTGCC	AAGTGGAGAA	4860
GTGATAAAAA	AGAATTTATC		GCGTAAGGAA			4920
ATCAAAAATG	AAGTTCTCTC	AAAAGTTAGA		TGACTTTGGG	AGAATTTCAT	4920
TTTATTATTA	ATATATAAAA	TTTCTTGACA	TACAACTTAA	AAAGAGGTGG	AUTATTOM	
AGTTAATT	(SEQ ID NO	: 11)			ANIAITIACI	5040
		,				5048

CAGAGATCTT AGTGAATCAA ATATACT	TAA GAAAAGAGGA	AAGAATGAAA	ATCAATAAAA	60
AATATCTAGC TGGGTCAGTA GCTACAC	TTG TTTTAAGTGT	CTGTGCTTAT	GAACTAGGTT	120
TGCATCAAGC TCAAACTGTA AAAGAAA	ATA ATCGTGTTTC	CTATATAGAT	GGAAAACAAG	180
CGACGCAAAA AACGGAGAAT TTGACTC	CTG ATGAGGTTAG	CAAGCGTGAA	GGAATCAACG	240
CCGAACAAAT CGTCATCAAG ATTACGG	ATC AAGGTTATGT	GACCTCTCAT	GGAGACCATT	300
ATCATTACTA TAATGGCAAG GTCCCTT	ATG ATGCCATCAT	CAGTGAAGAG	CTCCTCATGA	360
AAGATCCGAA TTATCAGTTG AAGGATT	CAG ACATTGTCAA	TGAAATCAAG	GGTGGTTATG	420
TCATTAAGGT AAACGGTAAA TACTATG	TTT ACCTTAAGGA	TGCAGCTCAT	GCGGATAATG	480
TCCGTACAAA AGAAGAAATC AATCGGC	AAA AACAAGAACA	TAGTCAGCAT	CGTGAAGGAG	540
GGACTTCAGC AAACGATGGT GCGGTAG	CCT TTGCACGTTC	ACAGGGACGC	TACACCACAG	600
ATGATGGTTA TATCTTCAAT GCATCTG				660
TTCCTCATGG AGATCATTAC CATTACA				720
CTGCTGCAGA AGCCTTCCTA TCTGGTC	GGG AAAATCTGTC	AAATTTAAGA	ACCTATCGCC	780
GACAAAATAG CGATAACACT CCAAGAA				840
CTACAAATAC TAACACAAGC AACAACA	GCA ACACTAACAG	TCAAGCAAGT	CAAAGTAATG	900
ACATTGATAG TCTCTTGAAA CAGCTCT	ACA AACTGCCTTT	GAGTCAACGC	CATGTAGAAT	960
CTGATGGCCT TATTTTCGAC CCAGCGC	AAA TCACAAGTCG	AACCGCCAGA	GGTGTAGCTG	1020
TCCCTCATGG TAACCATTAC CACTTTA	TCC CTTATGAACA	AATGTCTGAA	TTGGAAAAAC	1080
GAATTGCTCG TATTATTCCC CTTCGTT				1140
CAGAAGAACC AAGTCCACAA CCGACTC				1200
ATCCTCAACC AGCTCCAAGC AATCCAA				1260
AAGTAGGCGA TGGTTATGTC TTTGAGG				1320
ATCTTTCAGC AGAAACAGCA GCAGGCA				1380
CTCATAAGCT AGGAGCTAAG AAAACTG				1440
AGGCTTATGA CTTACTAGCA AGAATTC				1500
TTGATTTTGA GGCTTTGGAT AACCTGT				1560
TCAAGTTAGT GGATGATATT CTTGCCT				1620
GAAAACCAAA TGCGCAAATT ACCTACA				1680
GCAAGTACAC AACAGAAGAC GGTTATA				1740
GGGATGCCTA TGTAACTCCA CATATGA				1800
CTGAAGCTGA GAGAGCGGCA GCCCAGG				1860
CGACAGACCA TCAGGATTCA GGAAATAG	CTG AGGCAAAAGG	AGCAGAAGCT	ATCTACAACC	1920
GCGTGAAAGC AGCTAAGAAG GTGCCAC				1980
TAGAAGTCAA AAACGGTAGT TTAATCA				2040
TTGAGTGGTT TGACGAAGGC CTTTATG				2100
TGGCGACTGT CAAGTACTAT GTCGAACA				2160
TTGGTAACGC TAGCGACCAT GTTCAAAC				2220
CGGAAAAACC AAGCGAGGAG AAACCTC				2280
AAGAGAAACC ACAAAGCGAG AAACCAG				2340
AATCACCAGA GGAATCAGAA GAACCTCA				2400
GAGAGGCTGA AGATTTACTT GGAAAAA				2460
AGACTCTCAC AGGATTAAAA AATAATTT				2520
TGGCAGAAGC TGAAAAACTA TTGGCTTT				2580
TTCTAACTCC TAAAAACAGG ATAGGAGA	AC GGGAAAACGA	AAAATGAGAG	CAGAATGTGA	2640
GTTCTAG (SED ID NO : 12)				2647

GGGTCTTAA	A ACTCTGAAT	CTTTAGAGGG	AGACCCACAA	AATGACAAGA	CCTATTTAGA	60
AAATCTGGAA	A GAAAATATG <i>I</i>	A GTGTTCTAGO	: AGAAGAATTA	AAGTGAGGAA	AGAATGAAAA	120
TCAATAAAA	ATATCTAGC	GGTTCAGTGG	CAGTCCTTGC	CCTAAGTGTT	TGTTCCTATG	180
AACTTGGTCG	TCACCAAGC	GGTCAGGTTA	AGAAAGAGTC	TAATCGAGTT	י דרדים אים דם כי	240
ATGGTGATCA	A GGCTGGTCA	AAGGCAGAAA	ATTTGACACC	AGATGAAGTO	AGTAAGAGAG	300
AGGGGATCA	A CGCCGAACAA	ATTGTTATCA	AGATTACGGA	TCAAGGTTAT	GTGACCTCTC	360
ATGGAGACC	A TTATCATTAC	: TATAATGGCA	AGGTTCCTTA	TGATGCCATC	ATCAGTGAAG	420
AACTTCTCAT	GAAAGATCCG	AATTATCAGI	TGAAGGATTC	AGACATTGTC	AATGAAATCA	480
AGGGTGGCTA	A TGTGATTAAG	GTAGACGGAA	AATACTATGT	TTACCTTAAA	GATGCGGCCC	540
ATGCGGACAA	L TATTCGGACA	AAAGAAGAGA	TTAAACGTCA	GAAGCAGGAA	CACAGTCATA	600
ATCATAACTC	: AAGAGCAGAT	' AATGCTGTTG	CTGCAGCCAG	AGCCCAAGGA	CCTTATACAA	660
CGGATGATGG	GTATATCTTC	AATGCATCTG	ATATCATTGA	GGACACGGGT	GATGCTTATA	720
TCGTTCCTCA	CGGCGACCAT	' TACCATTACA	TTCCTAAGAA	TGAGTTATCA	GCTAGCGAGT	780
TAGCTGCTGC	AGAAGCCTAT	' TGGAATGGGA	AGCAGGGATC	TCGTCCTTCT	TCAAGTTCTA	840
GTTATAATGC	: AAATCCAGTT	' CAACCAAGAT	TGTCAGAGAA	CCACAATCTG	ACTGTCACTC	900
CAACTTATCA	TCAAAATCAA	GGGGAAAACA	TTTCAAGCCT	TTTACGTGAA	TTGTATGCTA	960
AACCCTTATC	AGAACGCCAT	GTAGAATCTG	ATGGCCTTAT	TTTCGACCCA	GCGCAAATCA	1020
CAAGTCGAAC	CGCCAGAGGT	GTAGCTGTCC	CTCATGGTAA	CCATTACCAC	TTTATCCCTT	1020
ATGAACAAAT	GTCTGAATTG	GAAAAACGAA	TTGCTCGTAT	TATTCCCCTT	CGTTATCCCTT	1140
CAAACCATTG	GGTACCAGAT	TCAAGACCAG	AACAACCAAG	TCCACAATCG	ACTCCGGAAC	1200
CTAGTCCAAG	TCTGCAACCT	GCACCAAATC	CTCAACCAGC	TCCAAGCAAT	CCAATTGATG	1260
AGAAATTGGT	CAAAGAAGCT	GTTCGAAAAG	TAGGCGATGG	TTATGTCTTT	GAGGAGAATG	1320
GAGTTTCTCG	TTATATCCCA	GCCAAGGATC	TTTCAGCAGA	AACAGCAGCA	GGCATTGATA	1380
GCAAACTGGC	CAAGCAGGAA	AGTTTATCTC	ATAAGCTAGG	AGCTAAGAAA	ACTGACCTCC	1440
CATCTAGTGA	TCGAGAATTT	TACAATAAGG	CTTATGACTT	ACTAGCAAGA	ATTCACCICC	1500
ATTTACTTGA	TAATAAAGGT	CGACAAGTTG	ATTTTGAGGT	TTTCCATAAC	CTCTTCCAAG	1560
GACTCAAGGA	TGTCTCAAGT	GATAAAGTCA	AGTTAGTGGA	TEATATATA	CCCTTCTTAC	
CTCCGATTCG	TCATCCAGAA	CGTTTAGGAA	AACCAAATGC	CCANATTAC	WACA CHICATAG	1620
ATGAGATTCA	AGTAGCCAAG	TTGGCAGGCA	AGTACACAAC	ACANATIACC	TACACTGATG	1680
ATCCTCGTGA	TATAACCAGT	GATGAGGGGG	ATGCCTATGT	AGAAGACGGI	AMONGGON	1740
GCCACTGGAT	TAAAAAACAT	ACTITICITOTIC	AAGCTGAGAG	AACTCCACAT	AIGACCCATA	1800
CTAAAGAGAA	AGGTTTGACC	CCTCCTTCCA	CAGACCACCA	CCAMMONACO	CAGGCTTATG	1860
CAAAAGGAGC	AGAAGCTATC	TACAACCGCG	TGAAAGCAGC	GGALI CAGGA	AATACTGAGG	1920
GTATGCCTTA	CAATCTTCAA	TATACTGTAG	AAGTCAAAAA	CCCTACCTTA	CCACTTGATC	1980
ATTATGACCA	TTACCATAAC	ATCAAATTTC	AGTGGTTTGA	CGAACGCCTTA	ATCATACCTC	2040
CTAAGGGGTA	TAGTCTTGAG	GATCTTTTCC	CGACTGTCAA	CGAAGGCCTT	TATGAGGCAC	2100
ACGAACGTCC	GCATTCAGAT	AATCGTTTTG	GTAACGCTAG	GIACTATGTC	GAACATCCAA	2160
AGGCAGACCA	AGATAGTAAA	CCTCATCAAC	ATAAGGAACA	TGACCATGTT	CGTAAAAATA	2220
CTCACCCTGA	ATCTGATGAA	ADAGAGAATG	ACGCTGGTTT	TGATGAAGTA	AGTGAGCCAA	2280
TTTATAAACC	AAGCACTGAT	ACCCAACACA	ACGCTGGTTT	AAATCCTTCA	GCAGATAATC	2340
AGGCTGAAAT	TCCTCA ACTA	ACGGAAGAGA CRCRREEGE	CAGAGGAAGA	AGCTGAAGAT	ACCACAGATG	2400
CCTTCCTACA	TOUTCHAGTA	GAGAATTCTG	TTATTAACGC	TAAGATAGCA	GATGCGGAGG	2460
CTCTTGCTAGA	TACTOTTCO	GATCCTAGTA	TTAGACAAAA	TGCTATGGAG	ACATTGACTG	2520
OTCIWAWWW.	CCCMMMMC	CTCGGAACGA	AAGATAATAA	CACTATTTCA	GCAGAAGTAG	2580
(CEO ID NO	GGCTTTGTTA	AAAGAAAGTC	AACCGGCTCC	TATACAGTAG	TAAAATGAA	2639
(SEQ ID NO	: 13)			•		

MKINKKYLAG	SVAVLALSVC	SYELGRHQAG	QVKKESNRVS	YIDGDQAGQK	50
AENLTPDEVS	KREGINAEQI	VIKITDQGYV	TSHGDHYHYY	NGKVPYDAII	100
SEELLMKDPN	YQLKDSDIVN	EIKGGYVIKV	DGKYYVYLKD	AAHADNIRTK	150
EEIKRQKQEH	SHNHNSRADN	AVAAARAQGR	YTTDDGYIFN	ASDITEDTGD	200
AYIVPHGDHY	HYIPKNELSA	SELAAAEAYW	NGKQGSRPSS	SSSYNANPVQ	250
PRLSENHNLT	VTPTYHQNQG	ENISSLLREL	YAKPLŚERHV	ESDGLIFDPA	300
QITSRTARGV	AVPHGNHYHF	IPYEQMSELE	KRIARIIPLR	YRSNHWVPDS	350
RPEQPSPQST	PEPSPSLQPA	PNPQPAPSNP	IDEKLVKEAV	RKVGDGYVFE	400
ENGVSRYIPA	KDLSAETAAG	IDSKLAKQES	LSHKLGAKKT	DLPSSDREFY	450
NKAYDLLARI	HQDLLDNKGR	QVDFEVLDNL	LERLKDVSSD	KVKLVDDILA	500
FLAPIRHPER	LGKPNAQITY	TDDEIQVAKL	AGKYTTEDGY	IFDPRDITSD	550
EGDAYVTPHM	THSHWIKKDS	LSEAERAAAQ	AYAKEKGLTP	PSTDHQDSGN	600
TEAKGAEAIY	NRVKAAKKVP	LDRMPYNLQY	TVEVKNGSLI	IPHYDHYHNI	650
KFEWFDEGLY	EAPKGYSLED	LLATVKYYVE	HPNERPHSDN	GFGNASDHVR	700
KNKADQDSKP	DEDKEHDEVS	EPTHPESDEK	ENHAGLNPSA	DNLYKPSTDT	750
EETEEEAEDT	TDEAEIPQVE	NSVINAKIAD	AEALLEKVTD	PSIRQNAMET	800
LTGLKSSLLL	GTKDNNTISA	EVDSLLALLK	ESQPAPIQ		838
(SEQ ID NO	: 14)				

TGTGCCTATG	CACTAAACCA	GCATCGTTCG	CAGGAAAATA	AGGACAATAA	TCGTGTCTCT	60
TATGTGGATG	GCAGCCAGTC	AAGTCAGAAA	AGTGAAAACT	TGACACCAGA	ССРССТТРСС	120
CAGAAAGAAG	GAATTCAGGC	TGAGCAAATI	GTAATCAAAA	TTACAGATCA	GGGCTATCTA	180
ACGTCACACG	GTGATCACTA	TCATTACTAT	AATGGGAAAG	TTCCTTATGA	TGCCCTCTTT	240
AGTGAAGAAC	TCTTGATGAA	GGATCCAAAC	TATCAACTTA	AAGACGCTGA	TATTGTCAAT	300
GAAGTCAAGG	GTGGTTATAT	CATCAAGGTC	GATGGAAAAT	' ATTATGTCTA	ССТСАВВСВТ	360
GCAGCTCATG	CTGATAATGT	TCGAACTAAA	GATGAAATCA	ATCGTCAAAA	ACAAGAACAT	420
GTCAAAGATA	ATGAGAAGGT	TAACTCTAAT	GTTGCTGTAG	CAAGGTCTCA	GGGACGATAT	480
ACGACAAATG	ATGGTTATGT	CTTTAATCCA	GCTGATATTA	TCGAAGATAC	GGGTAATGCT	540
TATATCGTTC	CTCATGGAGG	TCACTATCAC	TACATTCCCA	AAAGCGATTT	ልጥርጥርርጥ ልርጥ	600
GAATTAGCAG	CAGCTAAAGC	ACATCTGGCT	GGAAAAAATA	TGCAACCGAG	ጥሮ እርጥጥ አለር ሮ	660
TATTCTTCAA	CACCTTCTCC	ATCTCTTCCA	ATCAATCCAG	GAACTTCACA	TCACAAACAT	720
GAAGAAGATG	GATACGGATT	TGATGCTAAT	CGTATTATCG	CTGAAGATGA	ATCACCTTTT	780
GTCATGAGTC	ACGGAGACCA	CAATCATTAT	TTCTTCAAGA	AGGACTTGAC	AGAAGAGCAA	840
ATTAAGGCTG	CGCAAAAACA	TTTAGAGGAA	GTTAAAACTA	GTCATAATGG	ልጥጥል ር ልጥጥርጥ	900
TIGICATCTC	ATGAACAGGA	TTATCCAAGT	AATGCCAAAG	AAATGAAAGA	ጥጥ ከርልጥል አል	960
AAAATCGAAG	AAAAAATTGC	TGGCATTATG	AAACAATATG	GTGTCAAACG	TCDDDCTDTT	1020
GICGIGAATA	AAGAAAAAA	TGCGATTATT	TATCCGCATG	GAGATCACCA	ፕሮ ልፕሮሮ <u>ል</u> ሮልጥ	1080
CCGATTGATG	AACATAAACC	GGTTGGAATT	GGTCATTCTC	ACAGTAACTA	ጥር እ እ ር ጥር ጥጥ ጥ	1140
AAACCCGAAG	AAGGAGTTGC	TAAAAAAGAA	GGGAATAAAG	TTTATACTGG	ል ሮልልሮልልጥጥል	1200
ACGAATGTTG	TTAATTTGTT	AAAAAATAGT	ACGTTTAATA	ATCADADCTT	TACTCTAGCC	1260
AATGGTCAAA	AACGCGTTTC	TTTTAGTTTT	CCGCCTGAAT	TGGAGAAAA	ል ተተልርርተልተር	1320
AATATGCTAG	TAAAATTAAT	AACACCAGAT	GGAAAAGTAT	TGGAGAAAGT	ልጥርጥርርጥል እ እ	1380
GTATTTGGAG	AAGGAGTAGG	GAATATTGCA	AACTTTGAAT	TAGATCAACC	ጥፐልጥጥጥልርርል	1440
GGACAAACAT	TTAAGTATAC	TATCGCTTCA	AAAGATTATC	CAGAAGTAAG	TTATGATGGT	1500
ACATTTACAG	TTCCAACCTC	TTTAGCTTAC	AAAATGGCCA	GTCAAACGAT	ጥጥጥርጥ አጥር ርጥ	1560
TICCATGCAG	GGGATACTTA	TTTAAGAGTG	AACCCTCAAT	TTGCAGTGCC	ጥልልልሮርልልሮም	1620
GATGCTTTAG	TCAGAGTGTT	TGATGAATTT	CATGGAAATG	CTTATTTAGA	AAATAACTAT	1680
AAAGTTGGTG	AAATCAAATT	ACCGATTCCG	AAATTAAACC	AAGGAACAAC	CAGAACGGCC	1740
GGAAATAAAA	TTCCTGTAAC	CTTCATGGCA	AATGCTTATT	TGGACAATCA	ATCGACTTAT	1800
ATTGTGGAAG	TACCTATCTT	GGAAAAAGAA	AATCAAACTG	ATAAACCAAG	TATTCTACCA	1860
CAATTAAAA	GGAATAAAGC	ACAAGAAAAC	TCAAAACTTG	ATGAAAAGGT	AGAAGAACCA	1920
AAGACIAGIG	AGAAGGTAGA	AAAAGAAAA	CTTTCTGAAA	CTGGGAATAG	ፕ ልርጥልርጥልልጥ	1980
TCAACGTTAG	AAGAAGTTCC	TACAGTGGAT	CCTGTACAAG	AAAAAGTAGC	ስ ስ ስ ስ ጥጥጥር ር ጥ	2040
GAAAGTTATG	GGATGAAGCT	AGAAAATGTC	TTGTTTAATA	TGGACGGAAC	እ ለጥጥር እ አጥጥ አ	2100
TATTIACCAT (CGGGAGAAGT	CATTAAAAAG	AATATGGCAG	ATTTTACAGG	AGAAGCACCT	2160
CAAGGAAATG (GTGAAAATAA	ACCATCTGAA	AATGGAAAAG	TATCTACTCC	AACAGTTCAC	2220
AACCAACCAA	CAGAAAATAA	ACCAGCAGAT	TCTTTACCAG	AGGCACCAAA	CCAAAAACCT	2280
GIAAAACCAG A	AAAACTCAAC	GGATAATGGA	ATGTTGAATC	CAGAAGGGAA	TGTGGGGACT	2340
GACCCTATGT	PAGATTCAGC	ATTAGAGGAA	GCTCCAGCAG	TAGATCCTCT	Δαδασδηλη	2400
TIAGAAAAAT :	l'TACAGCTAG	TTACGGATTA	GGCTTAGATA	GTGTTATATT	ሮልልጥልጥርርልጥ	2460
GGAACGATTG A	AATTAAGATT	GCCAAGTGGA	GAAGTGATAA	AAAAGAATTT	ATTGATCTCA	2520
TAGCGTAA	(SEQ ID NO	: 15)	•			2528
						-

(SEQ ID NO : 16)

CAYALNQHRS	QENKDNNRVS	YVDGSQSSQK	SENLTPDQVS	QKEGIQAEQI	50
VIKITDQGYV	TSHGDHYHYY	NGKVPYDALF	SEELLMKDPN	YQLKDADIVN	100
EVKGGYIIKV	DGKYYVYLKD	AAHADNVRTK	DEINRQKQEH	VKDNEKVNSN	150
VAVARSQGRY	TTNDGYVFNP	ADIIEDTGNA	YIVPHGGHYH	YIPKSDLSAS	200
ELAAAKAHLA	GKNMQPSQLS	YSSTPSPSLP	INPGTSHEKH	EEDGYGFDAN	250
RIIAEDESGF	VMSHGDHNHY	FFKKDLTEEQ	IKAAQKHLEE	VKTSHNGLDS	300
LSSHEQDYPS	NAKEMKDLDK	KIEEKIAGIM	KQYGVKRESI	VVNKEKNAII	350
YPHGDHHHAD	PIDEHKPVGI	GHSHSNYELF	KPEEGVAKKE	GNKVYTGEEL	400
TNVVNLLKNS	TFNNQNFTLA	NGQKRVSFSF	PPELEKKLGI	NMLVKLITPD	450
GKVLEKVSGK	VFGEGVGNIA	NFELDQPYLP	GQTFKYTIAS	KDYPEVSYDG	500
TFTVPTSLAY	KMASQTIFYP	FHAGDTYLRV	NPQFAVPKGT	DALVRVFDEF	550
HGNAYLENNY	KVGEIKLPIP	KLNQGTTRTA	GNKIPVTFMA	NAYLDNQSTY	600
IVEVPILEKE	NQTDKPSILP	QFKRNKAQEN	SKLDEKVEEP	KTSEKVEKEK	650
LSETGNSTSN	STLEEVPTVD	PVQEKVAKFA	ESYGMKLENV	LFNMDGTIEL	700
YLPSGEVIKK	NMADFTGEAP	QGNGENKPSE	NGKVSTGTVE	NOPTENKPAD	750
SLPEAPNEKP	VKPENSTDNG	MLNPEGNVGS	DPMLDSALEE	APAVDPVQEK	800
LEKFTASYGL	GLDSVIFNMD	GTIELRLPSG	EVIKKNITIS		840

CAYALNOHRS	QENKDNNRVS	YVDGSQSSQK	SENLTPDQVS	QKEGIQAEQI	50
VIKITDQGYV	TSHGDHYHYY	NGKVPYDALF	SEELLMKDPN	YQLKDADIVN	100
EVKGGYIIKV	DGKYYVYLKD	AAHADNVRTK	DEINRQKQEH	VKDNEKVNSN	150
VAVARSQGRY	TTNDGYVFNP	ADIIEDTGNA	YIVPHGGHYH	YIPKSDLSAS	200
ELAAAKAHLA	GKNMQPSQLS	YSSTASDNNT	QSVAKGSTSK	PANKSENLOS	250
LLKELYDSPS	AQRYSESDGL	VFDPAKIISR	TPNGVAIPHG	DHYHFIPYSK	300
LSALEEKIAR	MVPISGTGST	VSTNAKPNEV	VSSLGSLSSN	PSSLTTSKEL	350
SSASDGYIFN	PKDIVEETAT	AYIVRHGDHF	HYIPKSNQIG	QPTLPNNSLA	400
TPSPSLPINP	GTSHEKHEED	GYGFDANRII	AEDESGFVMS	HGDHNHYFFK	450
KDLTEEQIKA	AQKHLEEVKT	SHNGLDSLSS	HEQDYPGNAK	EMKDLDKKIE	500
EKIAGIMKQY	GVKRESIVVN	KEKNAIIYPH	GDHHHADPID	EHKPVGIGHS	550
HSNYELFKPE	EGVAKKEGNK	VYTGEELTNV	VNLLKNSTFN	NONFTLANGO	600
KRVSFSFPPE	LEKKLGINML	VKLITPDGKV	LEKVSGKVFG	EGVGNIANFE	650
LDQPYLPGQT	FKYTIASKDY	PEVSYDGTFT	VPTSLAYKMA	SQTIFYPFHA	700
GDTYLRVNPQ	FAVPKGTDAL	VRVFDEFHGN	AYLENNYKVG	EIKLPIPKLN	750
QGTTRTAGNK	IPVTFMANAY	LDNQSTYIVE	VPILEKENOT	DKPSILPOFK	800
RNKAQENSKL	DEKVEEPKTS	EKVEKEKLSE	TGNSTSNSTL	EEVPTVDPVQ	850
EKVAKFAESY	GMKLENVLFN	MDGTIELYLP	SGEVIKKNMA	DFTGEAPQGN	900
GENKPSENGK	VSTGTVENQP	TENKPADSLP	EAPNEKPVKP	ENSTDNGMLN	950
PEGNVGSDPM	LDPALEEAPA	VDPVQEKLEK	FTASYGLGLD	SVIFNMDGTI	1000
ELRLPSGEVI	KKNLSDFIA	(SEQ ID NO	: 55)		1019

CAYALNQHRS	QENKDNNRVS	YVDGSQSSQK	SENLTPDQVS	QKEGIQAEQI	50
VIKITDQGYV	TSHGDHYHYY	NGKVPYDALF	SEELLMKDPN	YQLKDADIVN	100
EVKGGYIIKV	DGKYYVYLKD	AAHADNVRTK	DEINRQKQEH	VKDNEKVNSN	150
VAVARSQGRY	TTNDGYVFNP	ADIIEDTGNA	YIVPHGGHYH	YIPKSDLSAS	200
ELAAAKAHLA	GKNMQPSQLS	YSSTASDNNT	QSVAKGSTSK	PANKSENLOS	250
LLKELYDSPS	AQRYSESDGL	VFDPAKIISR	TPNGVAIPHG	DHYHFIPYSK	300
LSALEEKIAR	MVPISGTGST	VSTNAKPNEV	VSSLGSLSSN	PSSLTTSKEL	350
SSASDGYIFN	PKDIVEETAT	AYIVRHGDHF	HYIPKSNOTG	QPTLPNNSLA	400
TPSPSLPINP	GTSHEKHEED	GYGFDANRII	AEDESGEVMS	HCDHNHALLK	450
KDLTEEQIKA	AOKHLEEVKT	SHNGLDSLSS	HEODYPGNA		489
(SEO ID NO			QDII OMA		403

MKFSKKYIAA	GSAVIVSLSL	CAYALNOHRS	OENKDNNRVS	YVDGSQSSQK	SENT.TPDOVS	60
QKEGIQAEQI	VIKITDOGYV	TSHGDHYHYY	NGKVPVDALE	SEELLMKDPN	VOLKDYDIA	120
EVKGGYIIKV	DGKYYVYLKD	AAHADNVRTK	DETNROKOEH	VKDNEKVNSN	TOURDADIAN	
TTNDGYVFNP	ADIIEDTGNA	YTVPHGGHVH	ALDKOUTCVG	ELAAAKAHLA	CKMMODGOLG	180
YSSTASDNNT	OSVAKGSTSK	DANKGENTOG	TIPELVDONG	AQRYSESDGL	GRAMOPSQLS	240
TPNGVATPHG	DHARLDACK	ICATEEVIAD	MUDICAMAAM	VSTNAKPNEV	VFDPAKIISK	300
PSSLTTSKEL	CCACOCVIDA	DADTABBASA	MVPISGIGST	VSTNAKPNEV	VSSLGSLSSN	360
TDCDCIDIND	CECHERMED	PRDIVEETAT	AYIVRHGDHF	HYIPKSNQIG	QPTLPNNSLA	420
TPSPSLPINP	GIBRERREED	GYGFDANKII	AEDESGFVMS	HGDHNHYFFK	KDLTEEQIKA	480
AQKHLEEVKT	SHNGLDSLSS	HEQDYPGNA	(SEQ ID NO) : 57)		509

DLTEEQIKAA	QKHLEEVKTS	HNGLDSLSSH	EQDYPGNAKE	MKDLDKKIEE	50
KIAGIMKQYG	VKRESIVVNK			HKPVGIGHSH	100
SNYELFKPEE	GVAKKEGNKV	YTGEELTNVV	NLLKNSTFNN	ONFTLANGOK	150
RVSFSFPPEL	EKKLGINMLV	KLITPDGKVL	EKVSGKVFGE	GVGNIANFEL	200
DQPYLPGQTF	KYTIASKDYP	EVSYDGTFTV	PTSLAYKMAS	OTIFYPFHAG	250
DTYLRVNPQF	AVPKGTDALV	RVFDEFHGNA	YLENNYKVGE	IKLPIPKLNQ	300
GTTRTAGNKI	PVTFMANAYL	DNQSTYIVEV	PILEKENOTD	KPSILPOFKR	350
NKAQENSKLD	EKVEEPKTSE	KVEKEKLSET	GNSTSNSTLE	EVPTVDPVOE	400
KVAKFAESYG	MKLENVLFNM	DGTIELYLPS	GEVIKKNMAD	FTGEAPOGNG	450
ENKPSENGKV	STGTVENQPT	ENKPADSLPE	APNEKPVKPE	NSTDNGMLNP	500
EGNVGSDPML	DPALEEAPAV	DPVQEKLEKF	TASYGLGLDS	VIFNMDGTIE	550
LRLPSGEVIK	KNLSDFIAKL	RYRSNHWVPD	SRPEEPSPQP	TPEPSPSPQP	600
APNPQPAPSN	PIDEKLVKEA	VRKVGDGYVF	EENGVSRYIP	AKNLSAETAA	650
GIDSKLAKQE	SLSHKLGAKK	TDLPSSDREF	YNKAYDLLAR	IHQDLLDNKG	700
ROVDFEALDN	LLERLKDVSS	DKVKLVDDIL	AFLAPIRHPE	RLGKPNAQIT	750
YTDDEIQVAK		YIFDPRDITS	DEGDAYVTPH	MTHSHWIKKD	800
SLSEAERAAA	QAYAKEKGLT	PPSTDHQDSG	NTEAKGAEAI	YNRVKAAKKV	850
	YTVEVKNGSL	IIPHYDHYHN	IKFEWFDEGL	YEAPKGYTLE	900
DLLATVKYYV	EHPNERPHSD	NGFGNASDHV	QRNKNGQADT	NQTEKPSEEK	950
PQTEKPEEET	PREEKPQSEK	PESPKPTEEP	EEESPEESEE	POVETEKVEE	1000
KLREAEDLLG	KIQDPIIKSN	AKETLTGLKN	NLLFGTQDNN	TIMAEAEKLL	1050
ALLKESK (SEQ ID NO :	58)			1057
					_00,

CAYALNOHRS	GENKDNNRVS	YVDGSQSSQK	SENLTPDQVS	QKEGIQAEQI	50
VIKITDQGIV	DCVXXXXXXXX	NGKVPYDALE	SEELLMKDPN	YQLKDADIVN	100
FANGGITIKA	TTNDGYVFNP			VKDNEKVNSN	150
	EQ ID NO :		YIVPHGGHYE	YIPKSDLSAS	200
BUARA (S	PEO ID NO :	59)			205
		FIC	24		
		TIU	. 6 1		
CAYELGLHQA	QTVKENNRVS	YIDGKQATQK	TENLTPDEVS	KREGINAEQI	50
VIKIIDQGIV	ISHGUHYHYY	NGKVPYDALI	SEELLMKDPN	YQLKDSDIVN	100
PINGGIATA	NGKYYVYLKD	AAHADNVRTK	. EEINRQKQEH	SQHREGGTSA	150
I CACRI AAAR	QGRYTTDDGY	IFNASDITED	TGDAYIVPHG	DHYHYIPKNE	200
MACAMICATRACE	AFLSGRENLS	NLRTYRRONS	DNTPRTNWVP	SVSNPGTTNT	250
TATIONNON INS	QASQSNDIDS	PTKOTAKTAT	SQRHVESDGL	IFDPAQITSR	300
SDODAOLOGO	NUIULTEIEÖ	MOEDERKIAK	IIPLRYRSNH	WVPDSRPEEP GYVFEENGVS	350
RYTPAKNISA	ETAACTDOKI.	VAULGI GRAI	CARREDI DOC	DREFYNKAYD	400
LLARTHODIJ	DNKGBOADER	ALQESISHALIA	DUCCOVUVIV	DDILAFLAPI	450
RHPERIGKPN	AOTTVTDDET	OVAKIACKVT	UVSSUKVKLV	DITSDEGDAY	500
VTPHMTHSHW	TKKDSLSEAE	BARROWAKE	KCI.TDDCTDU	QDSGNTEAKG	550
AEAIYNRVKA	AKKVPLDRMP	VNI.OVTVEVIKE	MGGITIDHAD	HYHNIKFEWF	600
DEGLYEAPKG	YTLEDLLATV	KVVVEHDNED	DRCDMCECMY	SDHVQRNKNG	650
OADTNOTEKP	SEEKPQTEKP	REFETORERED	OCEVDECTAN	SUNVOKNANG	700
ESEEPOVETE	KVEEKLREAE	DITCKTODDI	TROMARESTA	CIVANIIIECT	750
ODNNTIMAEA	EKLLALLKES		ID NO : 60)	GUMMULLEGI	800 821
		y () Dag	1D NO . 607		821
		FIG	25		
Cayelglhqa	QTVKENNRVS	YIDGKQATQK	TENLTPDEVS	KREGINAEOI	50
VIKITDQGYV	QTVKENNRVS TSHGDHYHYY	YIDGKQATQK NGKVPYDAII	TENLTPDEVS SEELLMKDPN	YOLKDSDIVN	50 100
VIKITDQGYV EIKGGYVIKV	TSHGDHYHYY NGKYYVYLKD	YIDGKQATQK NGKVPYDAII AAHADNVRTK	TENLTPDEVS SEELLMKDPN EEINROKOEH	YQLKDSDIVN SOHREGGTSA	
VIKITDQGYV EIKGGYVIKV NDGAVAFARS	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE	100
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150 200
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150 200 250
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150 200 250 300
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150 200 250 300
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150 200 250 300
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT	100 150 200 250 300
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR	100 150 200 250 300 334
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKOE	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK	100 150 200 250 300 334
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS	100 150 200 250 300 334
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG	100 150 200 250 300 334
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL YIFDPRDITS	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE DEGDAYVTPH	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT MTHSHWIKKD	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK SLSEAERAAA	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG OAYAKEKGLT	100 150 200 250 300 334
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL YIFDPRDITS PPSTDHQDSG	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE DEGDAYVTPH NTEAKGAEAI	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT MTHSHWIKKD YNRVKAAKKV	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK SLSEAERAAA PLDRMPYNLO	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG QAYAKEKGLT YTVEVKNGSL	100 150 200 250 300 334 50 100 150 200
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL YIFDPRDITS PPSTDHQDSG IIPHYDHYHN	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE DEGDAYVTPH NTEAKGAEAI IKFEWFDEGL	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRONS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT MTHSHWIKKD YNRVKAAKKV YEAPKGYTLE	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK SLSEAERAAA PLDRMPYNLQ DLLATVKYYV	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG QAYAKEKGLT YTVEVKNGSL EHPNERPHSD	100 150 200 250 300 334 50 100 150 200 250
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL YIFDPRDITS PPSTDHQDSG IIPHYDHYHN NGFGNASDHV	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE DEGDAYVTPH NTEAKGAEAI IKFEWFDEGL QRNKNGQADT	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT MTHSHWIKKD YNRVKAAKKV YEAPKGYTLE NQTEKPSEEK	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK SLSEAERAAA PLDRMPYNLQ DLLATVKYYV PQTEKPEET	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG QAYAKEKGLT YTVEVKNGSL EHPNERPHSD PREEKPOSEK	100 150 200 250 300 334 50 100 150 200 250 300
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL YIFDPRDITS PPSTDHQDSG IIPHYDHYHN NGFGNASDHV PESPKPTEEP	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE DEGDAYVTPH NTEAKGAEAI IKFEWFDEGL QRNKNGQADT EEESPEESEE	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT MTHSHWIKKD YNRVKAAKKV YEAPKGYTLE NQTEKPSEEK PQVETEKVEE	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK SLSEAERAAA PLDRMPYNLQ DLLATVKYYV PQTEKPEEET KLREAEDLLG	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG QAYAKEKGLT YTVEVKNGSL EHPNERPHSD PREEKPOSEK	100 150 200 250 300 334 50 100 150 200 250 300 350
VIKITDQGYV EIKGGYVIKV NDGAVAFARS LSASELAAAE NTSNNSNTNS TARGVAVPHG (SEQ ID NO RYRSNHWVPD VRKVGDGYVF TDLPSSDREF DKVKLVDDIL YIFDPRDITS PPSTDHQDSG IIPHYDHYHN NGFGNASDHV PESPKPTEEP	TSHGDHYHYY NGKYYVYLKD QGRYTTDDGY AFLSGRENLS QASQSNDIDS NHYHFIPYEQ : 61) SRPEEPSPQP EENGVSRYIP YNKAYDLLAR AFLAPIRHPE DEGDAYVTPH NTEAKGAEAI IKFEWFDEGL QRNKNGQADT EEESPEESEE NLLFGTQDNN	YIDGKQATQK NGKVPYDAII AAHADNVRTK IFNASDIIED NLRTYRRQNS LLKQLYKLPL MSELEKRIAR FIG TPEPSPSPQP AKNLSAETAA IHQDLLDNKG RLGKPNAQIT MTHSHWIKKD YNRVKAAKKV YEAPKGYTLE NQTEKPSEEK PQVETEKVEE	TENLTPDEVS SEELLMKDPN EEINRQKQEH TGDAYIVPHG DNTPRTNWVP SQRHVESDGL IIPL APNPQPAPSN GIDSKLAKQE RQVDFEALDN YTDDEIQVAK SLSEAERAAA PLDRMPYNLQ DLLATVKYYV PQTEKPEEET KLREAEDLLG	YQLKDSDIVN SQHREGGTSA DHYHYIPKNE SVSNPGTTNT IFDPAQITSR PIDEKLVKEA SLSHKLGAKK LLERLKDVSS LAGKYTTEDG QAYAKEKGLT YTVEVKNGSL EHPNERPHSD PREEKPOSEK	100 150 200 250 300 334 50 100 150 200 250 300 350 400

AEAFLSGREN	LSNLRTYRRQ	NSDNTPRTNW	VPSVSNPGTT	NTNTSNNSNT	50
NSQASQSNDI	DSLLKQLYKL	PLSQRHVESD	GLIFDPAQIT	SRTARGVAVP	100
HGNHYHFIPY	EQMSELEKRI	ARIIPLRYRS	NHWVPDSRPE	EPSPQPTPEP	150
SPSPQPAPNP	QPAPSNPIDE	KLVKEAVRKV	GDGYVFEENG	VSRYIPAKNL	200
SAETAAGIDS	KLAKQESLSH	KLGAKKTDLP	SSDREFYNKA	YDLLARIHQD	250
LLDNKGRQVD	FEALDNLLER	LKDVSSDKVK	LVDDILAFLA	PIRHPERLGK	300
PNAQITYTDD	EIQVAKLAGK	YTTEDGYIFD	PRDITSDEGD	AYVTPHMTHS	350
HWIKKDSLSE	AERAAAQAYA	KEKGLTPPST	DHQDSGNTEA	KGAEAIYNRV	400
KAAKKVPLDR	MPYNLQYTVE	VKNGSLIIPH	YDHYHNIKFE	WFDEGLYEAP	450
KGYTLEDLLA	TVKYYVEHPN	ERPHSDNGFG	NASDHVQRNK	NGQADTNQTE	500
KPSEEKPQTE	KPEEETPREE	KPQSEKPESP	KPTEEPEEES	PEESEEPQVE	550
TERVEERLRE	AEDLLGKIQD			GTQDNNTIMA	600
EAEKLLALLK	ESK (SEQ	ID NO : 63)		613
		=== ~			
		FIG.	. <i>28</i>		
		110	~0		
DLTEEQIKAA	QKHLEEVKTS	HNGLDSLSSH	EODYPGNAKE	MKDI.DKKIEE	50
KIAGIMKQYG	VKRESIVVNK	EKNAIIYPHG	DHHHADPIDE	HKPVGTGHSH	100
SNYELFKPEE	GVAKKEGNKV	YTGEELTNVV	NLLKNSTFNN	ONFTLANGOK	150
RVSFSFPPEL	EKKLGINMLV	KLITPDGKVL	EKVSGKVFGE	GVGNIANFEL	200
DQPYLPGQTF	KYTIASKDYP	EVSYDGTFTV	PTSLAYKMAS	QTIFYPFHAG	250
	AVPKGTDALV			IKLPIPKLNO	300
GTTRTAGNKI	PVTFMANAYL	DNQSTYIVEV	PILEKENOTD		350
NKAQENSKLD	EKVEEPKTSE	KVEKEKLSET	GNSTSNSTLE	EVPTVDPVQE	400
	MKLENVLFNM			FTGEAPQGNG	450
	STGTVENQPT			NSTDNGMLNP	500
EGNVGSDPML	DPALEEAPAV	DPVQEKLEKF	TASYGLGLDS	VIFNMDGTIE	550
LRLPSGEVIK	KNLSDFIA	(SEQ ID NO			568
	·				
		FIC	. 29		
		TIU.			
DITEROTES	QKHLEEVKTS	UNCI DOI CON	EODVDOVA V~	MITTER TO THE TOTAL THE TOTAL TO THE TOTAL TOTAL TO THE T	
KIAGIMKOYG	VKRESIVVNK	THUSINGLASH	PUUUNDDIDE	MKDLOKKIEE	50
SNYELFKDEE	GVAKKEGNKV	THUMAL TIPE	DUULADETDE	nkpvG1GHSH	100
RVSFSFDDFI	EKKLGINMLV	TIGEOUINVV	MUDINISTENN	QNFTLANGQK	150
DOPYLPGOTE	KYTIASKDYP	MATI TOGE AT	DTCI NICES C		200
DTAL'ASTIL SATTTEGATE	VITTUOVNIE	EADIDGILLA.	PISLAYKMAS	QTIFYPFHAG	250
GTTRTACMEYE	AVPKGTDALV	TO CONTROL	ILENNYKVGE	TKT-DI-DKTNO	300
CTIMINGUMI	PVTFMANAYL	DMODITION	(PEG ID NO	: 65)	329

Serial No. 09/471,255 Docket No. 484112.438 Inventor(s): Josee Hamel et al.

Express Mail No. EV529814827US "REPLACEMENT SHEET"

EVPILEKENQ TDKPSILPQF KRNKAQENS	K LDEKVEEPKT SEKVEKEKI.S	50
ETGNSTSNST LEEVPTVDPV QEKVAKFAE	S YGMKLENVLF NMDGTTELVI.	100
PSGEVIKKNM ADFTGEAPQG NGENKPSENG	G KVSTGTVENO PTENKPADSI.	150
PEAPNEKPVK PENSTDNGML NPEGNVGSD	P MLDPALEEAP AVDPVOEKLE	200
KFTASYGLGL DSVIFNMDGT IELRLPSGE	V IKKNISDETA	240
(SEQ ID NO : 66)		240
FIC	01	
r I G	. 31	
DIRECTION		
DIDSLLKQLY KLPLSQRHVE SDGLIFDPAG	Q ITSRTARGVA VPHGNHYHFI	50
PYEQMSELEK RIARIIPLRY RSNHWVPDSF	R PEEPSPOPTP EPSPSPOPAP	100
NPQPAPSNPI DEKLVKEAVR KVGDGYVFER	B NGVSRYIPAK NLSAETAAGI	150
DSKLAKQESL SHKLGAKKTD LPSSDREFYN	N KAYDLLARIH QDLLDNKGRQ	200
VDFEALDNLL ERLKDVSSDK VKLVDDILAF	F LAPIRHPERL GKPNAQITYT	250
DDEIQVAKLA GKYTTEDGYI FDPRDITSDE	GDAYVTPHMT HSHWIKKDSL	300
SEAERAAAQA YAKEKGLTPP STDHQDSGNT	EAKGAEAIYN RVKAAKKVPL	350
DRMPYNLQYT VEVKNGSLII PHYDHYHNIK	FEWFDEGLYE APKGYTLEDL	400
LATVKYYVEH PNERPHSDNG FGNASDHVQF	R NKNGQADTNQ TEKPSEEKPQ	450
TEKPEEETPR EEKPQSEKPE SPKPTEEPEE	E ESPEESEEPO VETEKVEEKL	500
REAEDLLGKI QDPIIKSNAK ETLTGLKNNL	LFGTQDNNTI MAEAEKLLAL	550
LKESK (SEQ ID NO : 67)		555
DIC	00	
FIG.	32	
DIDGLIVOLV VI DI CODUNE ADAL TRADA		
DIDSLLKQLY KLPLSQRHVE SDGLIFDPAQ	TISRTARGVA VPHGNHYHFI	50
PYEOMSELEK RIARTIPLRY RSNHWVPDSR	PEEPSPQPTP EPSPSPQPAP	100
NPQPAPSNPI DEKLVKEAVR KVGDGYVFEE	NGVSRYIPAK NLSAETAAGI	150
DSKLAKQESL SHKLGAKKTD LPSSDREFYN	KAYDLLARIH QDLLDNKGRQ	200
VDFEALDNLL ERLKDVSSDK VKLVDDILAF	LAPIRHPERL GKPNAQITYT	250
DDEIQVAKLA GKYTTEDGYI FDPRDITSDE	GDAYVTPHMT HSHWIKKDSL	300
SEAERAAAQA YAKEKGLTPP STDHQDSGNT	EAKGAEAIYN RVKAAKKVPL	350
DRMPYNLQYT VEVKNGSLII PHYDHYHNIK		400
LATVKYYVEH PNERPHSDNG FGNASDHV	(SEQ ID NO : 68)	428
FIC	33	
TIU.	$\partial \mathcal{O}_{i}$	
GLYEAPKGYT LEDLLATVKY YVEHPNERPH	CONCECUACO INICORMINACO	
DTNQTEKPSE EKPQTEKPEE ETPREEKPQS	ENDECDADE EDEEDODES	50
EEPQVETEKV EEKLREAEDL L (SEQ II	D NO COV	100
TORY TENENCEMENT D (SEQ II	D NO : 69)	121
TILO	21	
FIG.	34	
ASDHVQRNKN GQADTNQTEK PSEEKPQTEK	PEEETPREEK POSEKPESPK	50
PTEEPEEESP EESEEPQVET EKVEEKLREA	EDLLGKIODP IIKSNAKETL	100
TGLKNNLLFG TQDNNTIMAE AEKLLALLKE	SK	132
(SEQ ID NO : 70)		
FIC.	25	

DIDSLLKQLY KLPLSQRHVE SDGLIFDPAQ ITSRTARGVA VPHGNHYHFI	50
PYEQMSELEK RIARIIPLRY RSNHWVPDSR PEEPSPOPTP EPSPSPOPAP	100
NPQPAPSNPI DEKLVKEAVR KVGDGYVFEE NGVSRYIPAK NLSAETAAGT	150
DSKLAKQESL SHKLGAKKTD LPSSDREFYN KAYDLLARIH ODLLDNKGRO	200
VDFEALDNLL ERLKDVSSDK VKLVDD (SEQ ID NO : 71)	226
	220
FIG. 36	
DILAFLAPIR HPERLGKPNA QITYTDDEIQ VAKLAGKYTT EDGYIFDPRD	50
ITSDEGDAYV TPHMTHSHWI KKDSLSEAER AAAQAYAKEK GLTPPSTDHQ	100
DSGNTEAKGA EAIYNRVKAA KKVPLDRMPY NLQYTVEVKN GSLIIPHYDH	150
YHNIKFEWFD EGLYEAPKGY TLEDLLATVK YYVEHPNERP HSDNGFGNAS	200
DHV (SEQ ID NO : 72)	203
FIG. 37	
TIG. 07	
CSYELGRHQA GQVKKESNRV SYIDGDQAGQ KAENLTPDEV SKREGINAEQ	50
IVIKITDQGY VISHGDHYHY YNGKVPYDAI ISEELLMKDP NYOLKDSDIV	100
NEIKGGYVIK VDGKYYVYLK DAAHADNIRT KEEIKROKOE HSHNHNSRAD	150
NAVAAARAQG RYTTDDGYIF NASDIIEDTG DAYIVPHGDH YHYIPKNELS	200
ASELAAAEAY WNGKQGSRPS SSSSYNANPV OPRLSENHNI, TVTPTVHONO	250
GENISSLIRE LYAKPLSERH VESDGLIFDP AOITSRTARG VAVPHGNHYH	300
FIPTEQMSEL EKRIARIIPL RYRSNHWVPD SRPEOPSPOS TPEPSPSLOP	350
APNPQPAPSN PIDEKLVKEA VRKVGDGYVF EENGVSRYIP AKDISAETAA	400
GIDSKLAKQE SLSHKLGAKK TDLPSSDREF YNKAYDLLAR IHODLLDNKG	450
RQVDFEVLDN LLERLKDVSS DKVKLVDDIL AFLAPIRHPE RLGKPNAOIT	500
YTDDEIQVAK LAGKYTTEDG YIFDPRDITS DEGDAYVTPH MTHSHWIKKD	550
SLSEAERAAA QAYAKEKGLT PPSTDHQDSG NTEAKGAEAI YNRVKAAKKV	600
PLDRMPYNLQ YTVEVKNGSL IIPHYDHYHN IKFEWFDEGL YEAPKGYSLE	650
DLLATVKYYV EHPNERPHSD NGFGNASDHV RKNKADODSK PDEDKEHDEV	700
SEPTHPESDE KENHAGLNPS ADNLYKPSTD TEETEEAED TTDEAETPOV	750
ENSVINAKIA DAEALLEKVT DPSIRQNAME TLTGLKSSLL LGTKDNNTIS	800
AEVDSLLALL KESQPAPIQ (SEQ ID NO : 73)	819
FIG. 38	
ENISSLLREL YAKPLSERHV ESDGLIFDPA QITSRTARGV AVPHGNHYHF	50
IPYEQMSELE KRIARIIPLR YRSNHWVPDS RPEQPSPQST PEPSPSLQPA	100
PNPQPAPSNP IDEKLVKEAV RKVGDGYVFE ENGVSRYIPA KDLSAETAAG	150
IDSKLAKQES LSHKLGAKKT DLPSSDREFY NKAYDLLARI HQDLLDNKGR	200
QVDFEVLDNL LERLKDVSSD KVKLVDDILA FLAPIRHPER LGKPNAQITY	250
TDDEIQVAKL AGKYTTEDGY IFDPRDITSD EGDAYVTPHM THSHWIKKDS	300
LSEAERAAAQ AYAKEKGLTP PSTDHQDSGN TEAKGAEAIY NRVKAAKKVP	350
LDRMPYNLQY TVEVKNGSLI IPHYDHYHNI KFEWFDEGLY EAPKGYSLED	400
LLATVKYYVE HPNERPHSDN GFGNASDHVR KNKADODSKP DEDKEHDEVS	450
EPTHPESDEK ENHAGLNPSA DNLYKPSTDT EETEEEAEDT TDEAEIPOVE	500
NSVINAKIAD AEALLEKVTD PSIRQNAMET LTGLKSSLLL GTKDNNTISA	550
EVDSLLALLK ESQPAPIQ (SEQ ID NO : 74)	568

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VRKNKADQDS	KPDEDKEHDE	VSEPTHPESD	EKENHAGLNP	SADNLYKPST	50
DTEETEEEAE	DTTDEAEIPQ	VENSVINAKI	ADAEALLEKV	TDPSIRQNAM	100
ETLTGLKSSL	LLGTKDNNTI	SAEVDSLLAL	LKESQPAPIQ		140
(SEQ ID NO	: 75)				

GACTTGACAG	AAGAGCAAAT	TAAGGCTGCG	CAAAAACATT	TAGAGGAAGT	50
TAAAACTAGT	CATAATGGAT	TAGATTCTTT	GTCATCTCAT	GAACAGGATT	100
				AATCGAAGAA	150
	GCATTATGAA				200
CGTGAATAAA	GAAAAAAATG	CGATTATTTA	TCCGCATGGA	GATCACCATC	250
ATGCAGATCC	GATTGATGAA	CATAAACCGG	TTGGAATTGG	TCATTCTCAC	300
AGTAACTATG	AACTGTTTAA	ACCCGAAGAA	GGAGTTGCTA	AAAAAGAAGG	350
GAATAAAGTT	TATACTGGAG	AAGAATTAAC	GAATGTTGTT	AATTTGTTAA	400
	GTTTAATAAT				450
	TTAGTTTTCC				500
	AAATTAATAA				550
	ATTTGGAGAA				600
	ATTTACCAGG				650
AGATTATCCA	GAAGTAAGTT	ATGATGGTAC	ATTTACAGTT	CCAACCTCTT	700
TAGCTTACAA	AATGGCCAGT	CAAACGATTT	TCTATCCTTT	CCATGCAGGG	750
GATACTTATT	TAAGAGTGAA	CCCTCAATTT	GCAGTGCCTA	AAGGAACTGA	800
TGCTTTAGTC	AGAGTGTTTG	ATGAATTTCA	TGGAAATGCT	TATTTAGAAA	850
ATAACTATAA	AGTTGGTGAA	ATCAAATTAC	CGATTCCGAA	ATTAAACCAA	900
	GAACGGCCGG				950
TGCTTATTTG	GACAATCAAT	CGACTTATAT	TGTGGAAGTA	CCTATCTTGG	1000
AAAAAGAAAA	TCAAACTGAT	AAACCAAGTA	TTCTACCACA	ATTTAAAAGG	1050
AATAAAGCAC	AAGAAAACTC	AAAACTTGAT	GAAAAGGTAG	AAGAACCAAA	1100
	AAGGTAGAAA				1150
CTAGTAATTC	AACGTTAGAA	GAAGTTCCTA	CAGTGGATCC	TGTACAAGAA	1200
AAAGTAGCAA	AATTTGCTGA	AAGTTATGGG	ATGAAGCTAG	AAAATGTCTT	1250
GTTTAATATG	GACGGAACAA	TTGAATTATA	TTTACCATCA	GGAGAAGTCA	1300
TTAAAAAGAA	TATGGCAGAT	TTTACAGGAG	AAGCACCTCA	AGGAAATGGT	1350
GAAAATAAAC	CATCTGAAAA	TGGAAAAGTA	TCTACTGGAA	CAGTTGAGAA	1400
CCAACCAACA	GAAAATAAAC	CAGCAGATTC	TTTACCAGAG	GCACCAAACG	1450
AAAAACCTGT	AAAACCAGAA	AACTCAACGG	ATAATGGAAT	GTTGAATCCA	1500
GAAGGGAATG	TGGGGAGTGA	CCCTATGTTA	GATCCAGCAT	TAGAGGAAGC	1550
TCCAGCAGTA	GATCCTGTAC	AAGAAAAATT	AGAAAAATTT	ACAGCTAGTT	1600
	CTTAGATAGT				1650
	CAAGTGGAGA				1700
AGCGAAGCTT	CGTTATCGTT	CAAACCATTG	GGTACCAGAT	TCAAGACCAG	1750
	TCCACAACCG				1800
	CTCAACCAGC				1850
	GTTCGAAAAG				1900
GAGTTTCTCG	TTATATCCCA	GCCAAGAATC	TTTCAGCAGA	AACAGCAGCA	1950
GGCATTGATA	GCAAACTGGC	CAAGCAGGAA	AGTTTATCTC	ATAAGCTAGG	2000
AGCTAAGAAA	ACTGACCTCC	CATCTAGTGA	TCGAGAATTT	TACAATAAGG	2050
CTTATGACTT	ACTAGCAAGA	ATTCACCAAG	ATTTACTTGA	TAATAAAGGT	2100
CGACAAGTTG	ATTTTGAGGC	TTTGGATAAC	CTGTTGGAAC	GACTCAAGGA	2150
TGTCTCAAGT	GATAAAGTCA	AGTTAGTGGA	TGATATTCTT	GCCTTCTTAG	2200
CTCCGATTCG	TCATCCAGAA	CGTTTAGGAA	AACCAAATGC	GCAAATTACC	2250
TACACTGATG	ATGAGATTCA	AGTAGCCAAG	TTGGCAGGCA	AGTACACAAC	2300
AGAAGACGGT	TATATCTTTG	ATCCTCGTGA	TATAACCAGT	GATGAGGGGG	2350
ATGCCTATGT	AACTCCACAT	ATGACCCATA	GCCACTGGAT	TAAAAAAGAT	2400
	AAGCTGAGAG				2450
AGGTTTGACC	CCTCCTTCGA	CAGACCATCA	GGATTCAGGA	AATACTGAGG	2500
CAAAAGGAGC	AGAAGCTATC	TACAACCGCG	TGAAAGCAGC	TAAGAAGGTG	2550
	and the second s		•	_	

CCACTTGATC	GTATGCCTTA	CAATCTTCAA	TATACTGTAG	AAGTCAAAAA	2600
CGGTAGTTTA	ATCATACCTC	ATTATGACCA	TTACCATAAC	ATCAAATTTG	2650
AGTGGTTTGA	CGAAGGCCTT	TATGAGGCAC	CTAAGGGGTA	TACTCTTGAG	2700
GATCTTTTGG	CGACTGTCAA	GTACTATGTC	GAACATCCAA	ACGAACGTCC	2750
GCATTCAGAT	AATGGTTTTG	GTAACGCTAG	CGACCATGTT	CAAAGAAACA	2800
AAAATGGTCA	AGCTGATACC	AATCAAACGG	AAAAACCAAG	CGAGGAGAAA	2850
CCTCAGACAG	AAAAACCTGA	GGAAGAAACC	CCTCGAGAAG	AGAAACCACA	2900
AAGCGAGAAA	CCAGAGTCTC	CAAAACCAAC	AGAGGAACCA	GAAGAAGAAT	2950
CACCAGAGGA	ATCAGAAGAA	CCTCAGGTCG	AGACTGAAAA	GGTTGAAGAA	3000
AAACTGAGAG	AGGCTGAAGA	TTTACTTGGA	AAAATCCAGG	ATCCAATTAT	3050
CAAGTCCAAT	GCCAAAGAGA	CTCTCACAGG	ATTAAAAAAT	AATTTACTAT	3100
TTGGCACCCA	GGACAACAAT	ACTATTATGG	CAGAAGCTGA	AAAACTATTG	3150
GCTTTATTAA	AGGAGAGTAA	G (SEQ II			3171

FIG. 41B

EAYWNGKQGS	RPSSSSSYNA	NPVQPRLSEN	HNLTVTPTYH	ONOGENISSI	50
LRELYAKPLS	ERHVESDGLI	FDPAQITSRT	ARGVAVPHGN	HYHFIPYEOM	100
SELEKRIARI	IPLRYRSNHW	VPDSRPEQPS	POSTPEPSPS	LOPAPNPOPA	150
PSNPIDEKLV	KEAVRKVGDG	YVFEENGVSR	YIPAKDLSAE	TAAGIDSKLA	200
KOESLSHKLG	${\tt AKKTDLPSSD}$	REFYNKAYDL	LARIHQDLLD	NKGRQVDFEV	250
LDNLLERLKD	VSSDKVKLVD	DILAFLAPIR	HPERLGKPNA	QITYTDDEIQ	300
VAKLAGKYTT	EDGYIFDPRD	ITSDEGDAYV	TPHMTHSHWI	KKDSLSEAER	350
AAAQAYAKEK	${\tt GLTPPSTDHQ}$	DSGNTEAKGA	EAIYNRVKAA	KKVPLDRMPY	400
NLQYTVEVKN	GSLIIPHYDH	YHNIKFEWFD	EGLYEAPKGY	SLEDITATVK	450
YYVEHPNERP	HSDNGFGNAS	DHV (SEQ	ID NO : 77)		473

CAYALNQHRS			SENLTPDQVS	QKEGIQAEQI	50
	TSHGDHYHYY		SEELLMKDPN	YQLKDADIVN	100
	DGKYYVYLKD	AAHADNVRTK	DEINROKOEH	VKDNEKVNSN	150
	TTNDGYVFNP	ADIIEDTGNA	YIVPHGGHYH	YIPKSDLSAS	200
	GKNMQPSQLS	YSSTASDNNT		PANKSENLOS	250
	AQRYSESDGL	VFDPAKIISR	TPNGVAI PHG		300
LSALEEKIAR I	MVPISGTGST	VSTNAKPNEV	VSSLGSLSSN		350
	PKDIVEETAT	AYIVRHGDHF	HYIPKSNQIG		400
	GTSHEKHEED	GYGFDANRII	AEDESGFVMS		450
KDLTEEQIKA A		SHNGLDSLSS			500
		KEKNAIIYPH	GDHHHADPID		550
HSNYELFKPE F	EGVAKKEGNK	VYTGEELTNV	VNLLKNSTFN		600
KRVSFSFPPE I		VKLITPDGKV	LEKVSGKVFG		650
LDQPYLPGQT I		PEVSYDGTFT	VPTSLAYKMA	SOTTEVDEHA	700
GDTYLRVNPQ H	FAVPKGTDAL	VRVFDEFHGN	AYLENNYKVG	EIKLPIPKLN	750
QGTTRTAGNK 1	IPVTFMANAY	LDNQSTYIVE	(SEQ ID I		780
		Ti C	10		
		IIG.	. 43		
CAYELGLHQA C	TVKENNRVS	YIDGKQATQK	TENI TODENC	VDECTNATOT	
		NGKVPYDAII	SEELLMKDPN	KREGINAEQI	50
		AAHADNVRTK		YQLKDSDIVN	100
	GRYTTDDGY	IFNASDIIED	TGDAYIVPHG	SQHREGGTSA	150
LSASELAAAE A		NLRTYRRONS	DNTPRTNWVP	DHYHYIPKNE	200
		LLKQLYKLPL	SQRHVESDGL	SVSNPGTTNT	250
_		MSELEKRIAR	IIPLRYRSNH	IFDPAQITSR	300
	. —		VKEAVRKVGD	WVPDSRPEEP	350
				GYVFEENGVS	400
		ALDNLLERLK		DREFYNKAYD	450
				DDILAFLAPI	500
	KKDSLSEAE		KGLTPPSTDH	DITSDEGDAY	550
AEAIYNRVKA A		YNLQYTVEVK		QDSGNTEAKG	600
_		KYYVEHPNER	DRGDMGEGY1Y	HYHNIKFEWF	650
(SEQ ID NO :	79)	+ ADMETABL	E HODINGE GIVA		690
<u>-</u>	· - ,				

FIG. 44

GTGAAGAAA	A CATATGGTT	A TATCGGCTCA	A GTTGCTGCC	TTTTACTAG	TACTCATATT	60
GGAAGTTAC	: AACTTGGTA <i>i</i>	A GCATCATATO	GGTCTAGCA	CAAAGGACA	TCACATTCCC	120
TATATTGAT	3 ACAGCAAAGC	TAAGGCAAA	A GCCCCTAAAA	CAAACAAAA	CATCCATCAA	180
ATCAGTGCT	; AAGAAGGCAI	CTCTGCTGA	A CAGATCGTAG	TCAAAATTAC	TGACCAACCC	240
IAIGIGACC	CACACGGTG	CCATTATCAT	TTTTACAATG	GGAAAGTTCC	TTATCATCCC	300
ATTATTAGT	AAGAGTTGT1	`GATGACGGA1	CCTAATTACC	GTTTTAAACT	ATCACACCTT	360
ATCAATGAAA	A TCTTAGACGG	TTACGTTATI	AAAGTCAATG	GCAACTATT	TCTTTACCTC	420
AAGCCAGGTA	A GTAAGCGCAA	AAACATTCGA	ACCAAACAAC	AAATTGCTG	GCAAGTAGCC	480
AAAGGAACTA	AAGAAGCTAA	. AGAAAAAGGI	TTAGCTCAAG	TGGCCCATCT	י ראכידאאאראא	540
GAAGTTGCGG	CAGTCAATGA	. AGCAAAAAGA	CAAGGACGCT	' ATACTACAGA	CCATCCCTAT	600
ATTTTTAGT	: CGACAGATAT	' CATTGATGAT	'TTAGGAGATG	רדעמיייעמכיי	ACCTCATCCT	660
AAICACIAIC	ATTATATTCC	TAAAAAGGAT	' TTGTCTCCAA	GTGAGCTAGC	TCCTCCDCD	720
GCCTACTGGA	I GTCAAAAACA	. AGGTCGAGGT	' GCTAGACCGT	CTGATTACCG	CCCGACACCA	780
GCCCCAGGTC	GTAGGAAAGC	' CCCAATTCCT	'GATGTGACGC	CTAACCCTCC	አርአአርርጥርአጥ	840
CAGCCAGATA	ACGGTGGCTA	TCATCCAGCG	CCTCCTAGGC	CAAATGATGC	GTCACAAAAC	900
AAACACCAAA	GAGATGAGTT	TAAAGGAAAA	ACCTTTAAGG	AACTTTTACA	ፕሮ ልልሮፕአርአር	960
CGTCTTGATT	TGAAATACCG	TCATGTGGAA	GAAGATGGGT	ፐርልጥጥጥጥርል	ACCCACTCAA	1020
GIGATCAAAT	CAAACGCTTT	TGGGTATGTG	GTGCCTCATG	GAGATCATTA	ጥሮአጥአጥጥአጥሮ	1080
CCAAGAAGTC	AGTTATCACC	TCTTGAAATG	GAATTAGCAG	ልጥሮርልጥልሮ ጥም	ACCTCCCCAA	1140
ACTGAGGACA	ATGACTCAGG	TTCAGAGCAC	TCAAAACCAT	CAGATAAAGA	ACTCACACAT	1200
ACCITICITE	GTCATCGCAT	CAAAGCTTAC	GGAAAAGGCT	TAGATGGTAA	ልሮሮል ጥልጥሮልጥ	1260
ACGAGTGATG	CTTATGTTTT	TAGTAAAGAA	TCCATTCATT	CAGTGGATAA	ATCAGGAGTT	1320
ACAGCTAAAC	ACGGAGATCA	TTTCCACTAT	ATAGGATTTG	GAGAACTTGA	ACAATATCAC	1380
1 1 GGATGAGG	TCGCTAACTG	GGTGAAAGCA	AAAGGTCAAG	CTGATGAGCT	でここでここででここで	1440
1 IGGATCAGG	AACAAGGCAA	AGAAAAACCA	CTCTTTGACA	CTAAAAAAACT	GACTCCCAAA	1500
GIAACAAAAG	ATGGTAAAGT	GGGCTATATG	ATGCCAAAAG	ATGGTAAGGA	ርጥ <u>ል</u> ጥጥጥርጥ አጥ	1560
GCTCGTGATC	AACTTGATTT	GACTCAGATT	GCCTTTGCCG	AACAAGAACT	እስጥርር ጥጥ እ አ	1620
GATAAGAAGC	ATTACCGTTA	TGACATTGTT	GACACAGGTA	TTGAGCCACG	Δ CTTCCTCTA	1680
GAIGIGICAA	GTCTGCCGAT	GCATGCTGGT	AATGCTACTT	ACGATACTCC	እ እርጥጥርርጥጥጥ	1740
GTTATCCCAC	ATATTGATCA	TATCCATGTC	GTTCCGTATT	CATGGTTGAC	CCCCCATCAC	1800
ATTGCAACAG	TCAAGTATGT	GATGCAACAC	CCCGAAGTTC	GTCCGGATGT	Δ ΨርርΨርΨλλር	1860
CCAGGGCATG	AAGAGTCAGG	TTCGGTCATT	CCAAATGTTA	CGCCTCTTCA	TAAACCTCCT	1920
GGIAIGCCAA	ACTGGCAAAT	TATCCATTCT	GCTGAAGAAG	TTCAAAAAGC	CCTACCACAA	1980
GGICGITIIG	CAACACCAGA	CGGCTATATT	TTCGATCCAC	GAGATGTTTT	CCCCAAACAA	2040
ACTITIGIAT	GGAAAGATGG	CTCCTTTAGC	ATCCCAAGAG	CAGATGGCAG	TTCATTCACA	2100
ACCATTAATA	AATCTGATCT	ATCCCAAGCT	GAGTGGCAAC	AAGCTCAAGA	GTTATTGGGA	2160
AAGAAAAATA	CTGGTGATGC	TACTGATACG	GATAAACCCA	AAGAAAAGCA	DCDCCCDCDT	2220
AAGAGCAATG	AAAACCAACA	GCCAAGTGAA	GCCAGTAAAG	AAGAAAAAGA	ATCAGGCAGAI	
TITATAGACA	GTTTACCAGA	CTATGGTCTA	GATAGAGCAA	CCCTAGAAGA	ጥር አጥልጥር አ አጥ	2280
CAATTAGCAC	AAAAAGCTAA	TATCGATCCT	AAGTATCTCA	ጥጥጥጥርርልልርር	ACAACCTCTC	2340
CAATTTTATA	ATAAAAATGG	TGAATTGGTA	ACTTATGATA	TCAAGACACT	TCAAGGIGIC	2400
AACCCTTAA	(SEQ ID NO) : 80)		- Sea Concret	- CANCAMAIM	2460 2469
		•				2409

VKKTYGYIGS	VAAILLATHI	GSYQLGKHHM	GLATKDNQIA	YIDDSKGKAK	50
APKTNKTMDQ	ISAEEGISAE	QIVVKITDQG	YVTSHGDHYH	FYNGKVPYDA	100
IISEELLMTD	PNYRFKQSDV	INEILDGYVI	KVNGNYYVYL	KPGSKRKNTR	150
TKQQIAEQVA	KGTKEAKEKG	LAQVAHLSKE	EVAAVNEAKR	OGRYTTDDGY	200
IFSPTDIIDD	LGDAYLVPHG	NHYHYIPKKD	LSPSELAAAO	AYWSOKOGRG	250
ARPSDYRPTP	APGRRKAPIP	DVTPNPGQGH	OPDNGGYHPA	PPRPNDASON	300
KHQRDEFKGK	TFKELLDQLH	RLDLKYRHVE	EDGLIFEPTO	VIKSNAFGVV	350
VPHGDHYHII	PRSQLSPLEM	ELADRYLAGQ	TEDNDSGSEH	SKESDKEVTH	40.0
TFLGHRIKAY	GKGLDGKPYD	TSDAYVFSKE	STHSVDKSGV	TAKACDABAA	450
IGFGELEQYE	LDEVANWVKA	KGQADELAAA	LDOEOGKEKD	LEDTYVUCDY	
VTKDGKVGYM	MPKDGKDYFY	ARDQLDLTQI	YEYEVEL WIN	DEDIKKASKY	500
DTGIEPRIAV	DVSSI.PMHAG	NATYDTGSSF	ATRITRUTE	DKKHIKIDIA	550
TATVKVVMOU	DEMODULING	DOUDDOGGET	ATBUTDHIHA	VPYSWLTRDQ	600
YELIOKY YE	ASMADANA COLUMNAT	PGHEESGSVI	PNVTPLDKRA	GMPNWQIIHS	650
AEEVQKALAE		FDPRDVLAKE	TFVWKDGSFS	IPRADGSSLR	700
TINKSDLSQA	EWQQAQELLA	KKNTGDATDT	DKPKEKQQAD	KSNENQQPSE	750
ASKEEKESDD	FIDSLPDYGL	DRATLEDHIN	QLAQKANIDP	KYLIFQPEGV	800
QFYNKNGELV	TYDIKTLQQI	NPP (SEQ	ID NO : 81)		823

GTGAAGAAA	A CATATGGTTA	A TATCGGCTCA	A GTTGCTGCC	A TTTTACTAGO	TACTCATATT	60
COLUMNIC	C WICTIGGIAN	I GCATCATATO	÷ GGTCTAGCA	נ מרא מראר מל מ	CONCERNICO COM	120
TUTUTIONI	ODMANJUMIA E	IAAGGCAAA	ኣ ር ርርርርር ተልል <i>ል ፣</i>) "" " " " " " " " " " " " " " " " " " "	CAMCODMAN	120
WICWGIGCI(J AAGAAGGCA1	CTCTGCTGAZ	A CAGATCGTAC	፤ ጥሮአአአአጥሞአረ		
TATOTOMCC.	I CACACGGIGA	CCATTATCAT	יידי אור אורי איידי איי	2 CC3333Cmmcc	~~~~~~~~	240
WITH ING!	3 AAGAGTTGTT	GAIGACGGAI	L CCLBALLACC	אר <i>י א</i> א א ידיידיידים א	ATCACACOTO	300 360
111 CWI GWW	A ICIIAGACGG	1TACGTTATT	I AAAGTCAATG	ያ ርርሶል እርጥ አጥጥ አ	TOTAL ACTOR	420
124GCCVGGT	4 GIANGCGCAA	AAACATTCG	ኒ გ ሮሮኔኔልሮኔኔሮ	י אאארירירייעעעע	CONTON	480
INTROGUACIA	1 MAGAAGCIAA	. AGAAAAAGGT	` ጥጥ <u>ል</u> ርርጥር አልር	* TCCCCCATCA	CACCETANA	540
0.0.01.0000	CAGICAAIGA	AGCAAAAAGA	L CAAGGACGCT	ነ አጥአሮጥአሮአሮአ	CCNECCOMN	600
WITTITIOI(- CGACAGATAT	CATTGATGAT	' TTACCACACC	ייי אייייייייייייייייייייייייייייייייי	3.00m03.moom	660
WITCHCIMI(- ATTATATTCC	TAAAAAAGAT	` ጥጥርጥርጥር ል ል	CTCACCTACC	TOOTOO O TO	720
OCTINCIOG!	S GICAMAMAÇA	AGGTCGAGGT	՝ GCTAGACCGT	י ריידיבו איידיו אירירי	CCCCTTCTCCT	780
OCCCCWGG1(, GIAGGAAAGC	TCCAATTCCT	' GATGTGACGC	י רידא א רירירודורור	303300mcs-	840
CAGCCAGAIA	ACGGIGGCTA	TCATCCAGCG	CCTCCTAGGC	י רא א א ידיכו א ידיכור	CTCACAAAAA	900
MANCACCAMA	GAGATGAGTT	TAAAGGAAAA		ארי איייייייייייייע א	man name as a	960
COLCILGATI	IGAAATACCG	TCATGTGGAA	GAACATCCCT	ፈሊጋ ሃ ውውውውውው ላ	3 CCC 3 CCC 3 3	1020
O TOW TOWN T	CHARCECTTT	TGGGTATGTG	$-$ GTGCCTC Δ TG	ごろごろ かごろ かのみ	marma mara ma	1020
CCMMGMAGIC	AGITATCACC	TCTTGAAATG	GAATTAGCAG	<u>እጥሮሮ እጥአ ሮሞ</u> ሞ	NCCCCCCCCC N	1140
VAC TONGONCH	AIGALICAGG	TTCAGATCAC	ጥሮልልልልሮሮአጥ	プカグスがスススペス	3 CMC 3 C3 C3 C	1200
MCCLITCIIG	GICATCGCAT	CAAAGCTTAC	GGDDDDCCCT	ጥለሮለጥሮሮሞአአ	3 CC 3 M 3 M C 3 M	1260
**COVOI QVIQ	CITAIGITIT	TAGTAAAGAA	TCCATTCATT	CACTCCATAA	7 TC 2 CC 2 CDD	1320
WOUNG TANAC	ACGGAGATCA	TTTCCACTAT	ATAGGATTTG	CACAACTTCA	A CA A MA MAKA	1380
1 1 GGW 1 GWGG	ICGCTAACTG	GGTGAAAGCA	AAAGGTCAAG	$CTC\DeltaTC\DeltaCCT$	TCCTCCTCCT	1440
TIGGATCAGG	AACAAGGCAA	AGAAAAACCA	CTCTTTGACA	ሮፐልልልልልልልር ም	CACTCCCAAA	1500
GINACHMANG	AIGGTAAAGT	GGGCTATATT	ATGCCAAAAG	ATCCCAACCA		1560
GCICGIGAIC	AACTTGATTT	GACTCAGATT	GCCTTTGCCC	አልሮአልሮአ አርጥ	AAMOOMMAAA	1620
OWINGWACC	ATTACCGTTA	TGACATTGTT	GACACAGGTA	TTCACCCACC	A COMO COMO MA	1680
OWIGIGICAM	GICIGCCGAT	GCATGCTGGT	<u>እ እጥርር ርጥል ርጥጥ</u>	አሮር አጥአሮምርር	3 3 0 mm 0 0 mmm	1740
GITATCCCIC	ATATTGATCA	TATCCATGTC	GTTCCGTATT	CATCCTTCAC	CCCCCAMGAG	1800
VI I GCWYCWW	ICAAGIAIGI	GATGCAACAC	CCCGAAGTTC	GTCCAGATGT	ለጥር/ርጥረ ጥ አለር	1860
CCMGGGCWIG	AAGAGTCAGG	TTCGGTCATT	$CC\Delta\Delta\Delta TCTT\Delta$	CCCCTCTTCA	TABACCICC	1920
GGIAIGCCAA	ATTGGCAAAT	CATCCATTCT	GCTGAAGAAG	ፕፕሮ እ እ እ አ አ ር ር	CCTACCACAA	1980
0010011110	CAACACCAGA	CGGCTATATT	TTCGATCCAC	はなけるからなかかかか	CCCCAAACAA	2040
MCITITGIAL	GGAAAGATGG	CTCCTTTAGC	ATCCCAAGAG	CAGATGGCAG	ጥጥሮ እጥጥሮ እር አ	2100
ACCALIAATA	AATCTGATCT	ATCCCAAGCT	GAGTGGCAAC	AAGCTCAAGA	CTTATTCCCA	2160
MAGAMAMCG	CIGGIGATGC	TACTGATACG	GATAAACCCA	AAGAAAAGCA	ACACCCACAT	2220
MAGAGCAATG	AAAACCAACA	GCCAAGTGAA	GCCAGTAAAG	ΔΔαΔΔαΔΔΔ	ACA ATCACAT	2280
GACITIATAG	ACAGTTTACC	AGACTATGGT	CTAGATAGAG	CAACCCTACA.	እርአጥርአጥአጥር	2340
VYICVATIVE	CACAAAAAGC	TAATATCGAT	CCTAAGTATC	TCDTTTTCCD	ACCACA ACCO	2400
GICCAMIIII	ATAATAAAA	TGGTGAATTA	GTAACTTATG	ATATCAAGAC	GCTTCAACAA	2460
ATAAACCCTT	AA (SEQ I	D NO : 82)				2472
		•				4412

VKKTYGYIGS			GLATKDNOIA	YIDDSKGKAK	50
APKTNKTMDQ	ISAEEGISAE	QIVVKITDOG	YVTSHGDHYH	FVNCKUDVDA	
IISEELLMTD	PNYHFKQSDV	INEILDGYVI		KPGSKRKNIR	100
TKQQIAEQVA	KGTKEAKEKG	LAQVAHLSKE			150
	LGDAYLVPHG		LSPSELAAAQ	AVMCOROCRA	200
	APGRRKAPIP	DVTPNPGQGH	DDDMCCATTUR	AIWSQKQGRG	250
	TFKELLDQLH				300
VPHGDHYHII			EDGLIFEPTQ		350
TFLGHRIKAY			TEDNDSGSDH	SKPSDKEVTH	400
	LDEVANWVKA	TSDAYVFSKE	SIRSVDKSGV	TAKHGDHFHY	450
VTKDGKVGYI			LDQEQGKEKP	LFDTKKVSRK	500
DTGIEPRLAV		ARDQLDLTQI	AFAEQELMLK	DKNHYRYDIV	550
IATIKYVMOH		NATYDTGSSF	VIPHIDHIHV	VPYSWLTRDQ	600
AEEVQKALAE	PEVRPDVWSK		PNVTPLDKRA	GMPNWQIIHS	650
	GRFATPDGYI	FDPRDVLAKE	TFVWKDGSFS	IPRADGSSLR	700
TINKSDLSQA	~ = - =	KKNAGDATDT	DKPKEKQQAD	KSNENQQPSE	750
ASKEEEKESD	DFIDSLPDYG	LDRATLEDHI	NQLAQKANID	PKYLIFQPEG	800
VQFYNKNGEL	VTYDIKTLQQ	INPP (SEQ			824